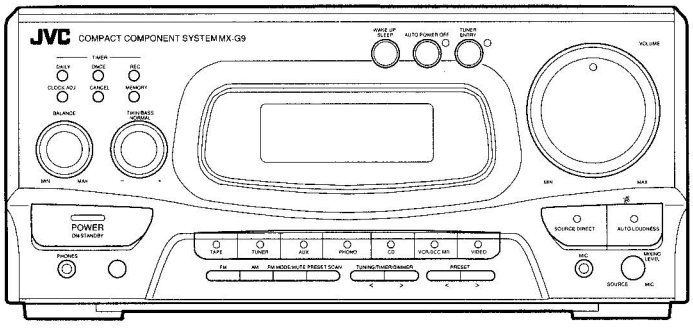
JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

CA-MXG9BK/XT-MXG9BK

(Unit No. RX-MXG9BK)



Note 1. This manual is for one part of the titled model consisting of the plural units as detailed.

Unit No. Consisted	Part of Model	Manual No.
RX-MXG9BK	TUNER-AMPLIFIER	20434
SE-MXG9BK	S.E.A. GRAPHIC EQUALIZER	20435
XL-MXG9BK	COMPACT DISC PLAYER	20436
TD-MXG9BK	CASSETTE DECK	20437

2. RX-MXG9BK is needed for the power supply when servicing the unit not provided with the power (mains) cord.

Contents

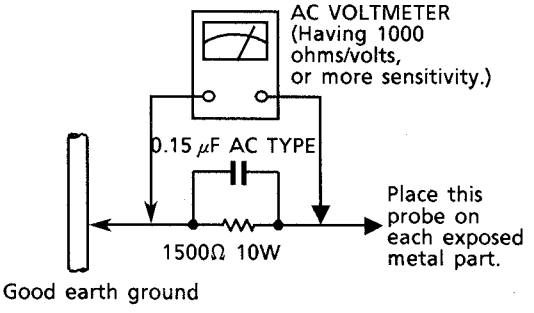
Safety Precautions 1-2
Instruction Book 1-3
Description of Major LSIs 1-43
Internal Connection of FL Display Tube .. 1-49
Disassembly Procedures 1-50
Adjustment Procedures 1-51
Block Diagrams 1-52
Schematic Diagrams ..... Insertion
Printed Circuit Boards ..... Insertion
Parts List ..... Insertion

品管理課

No. 20434
Jun. 1993

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).
     This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Table of Contents

About this Manual 2

How This Manual Is Organized 2

Easy Guide

Getting Started 3

Putting Batteries in the Remote 3
Connecting the System Control Cords and Connecting Auxiliary Equipment 4
Connecting the Front Speakers (Optional Speakers SP-MXG9BK) 5
Connecting Rear Speakers and Center Speaker 5
Connecting the AM and FM Antennas 6

Turning on the Unit , Playing from a Tape, and Fast Winding or Rewinding 7

Recording onto a Tape , Receiving Radio Broadcasts, and Playing CDs 8

Features Guide

Features 9

Adjusting the Sound 11

Using the SEA Preset Patterns 11
Creating Your own SEA Patterns 12

Using DSP (Digital Signal Processor) Programs 13

Changing the Speaker Angle 13
Dolby Pro Logic 13
DAP (Digital Acoustic Processor) Mode 16
DSEP (Digital Special Effects Processor) Mode 16
Special Sound Adjustment 17
Using 4CH/SEP. C (4 Channel Separate Center) 17
CSRP (COMPU LINK SOURCE RELATED PRESET SYSTEM) Function 19

Playing Tapes 20

Music Scan (Finding Songs) 20
Using Continuous Play 21
Skipping Blank Portions during Playback 21
Using the DOLBY NR selector 21

Recording onto Tape 22

High Speed Dubbing or Normal Speed Dubbing ... 22
Making a 4-second Blank on a Recorded Tape 22
Recording from CD-Fuzzy CD Recording 23
What is Fuzzy CD Recording? 24
Using CD Edit Mode 25

Receiving Radio Broadcasts 27

Using the Bandwidth Memory 27
Using Auto Preset Function 27
Tuning in a Preset Station 28
Selecting the FM Tuning Mode 28
Using the Tuner Entry Function 28

Playing CDs 29

Locating a Particular Track or a Particular Portion of the Track 29
Using Random Play 29
Using the Repeat Function 29
Using Programmed Play 30

Listening to a VCR , Record Player or other Equipment through Your CA-MXG9BK .. 31

Using the Timers 32

Setting the Clock 32
Setting the Recording Timer 33
Setting ONCE Timer/DAILY Timer 34
WAKE UP Timer 35
SLEEP Timer 35
Timer Priority 36

Vocal Masking (Sing Along) 37

How to Sing Along with Vocal Masking 37
Using the Microphone Only 37

Sing along with CD Graphics (using Optional VS-G3BK CD Graphics Decoder) 38

Vocal Masking with CD Graphics 38

Handling and Maintenance 39

Troubleshooting 40

Specifications 40

About this Manual

The Engineers at JVC have made the CA-MXG9BK very easy to use, and if you are experienced using audio equipment, you can figure out how to use some of the CA-MXG9BK controls by yourself. However, we have built some new features into this model, which you can learn about easily from the manual.

If you are a new user or just want a review, this manual explains how to use the CA-MXG9BK and take advantage of its features for playing and recording music, as well as other sounds. One way to use this manual is to read it through now and refer back to it when you need to refresh your skills for some special operation. Of course you can just look up the topics for things you want to do, such as recording a CD, but remember that you may need to refer to other parts of the manual for some of the instruction: for instance, in explaining how to record a CD, we assume you already know how to load a CD. That's why we recommend that you read the manual through once before starting. We've made it short, and easy to follow.

However, before you proceed, please read the Cautions on page 3 and the set-up directions.

How This Manual Is Organized

This manual is designed to accommodate several languages. To keep the size from becoming too great, yet still give you a top quality instruction manual, we have incorporated some special features:

- This manual is composed of 2 parts:
  Easy Guide (page 3-8) and Features Guide (page 9 - 38). Easy Guide describes basic operations and Features Guide describes other operations specific to this Unit.
- A fold-out page to look at while you read the instructions shows the front controls of the CA-MXG9BK. Some procedures have the illustrations of which control to use right with them, and for some you will need to look at the fold-out for the illustration.
- Basic information that is the same for many different functions is grouped in one place, and not repeated in each procedure. For instance, in the section on playing a CD, we do not repeat the information about setting the volume and the sound conditioning, which we talked about in the Easy Guide section.
- The illustrations on the left of the page are labeled to correspond to the explanations on the right. If a procedure is labeled with steps 1, 2, 3, then the illustrations on the left will also be labeled 1, 2, 3. This relationship makes it easy to read the explanation and also see what to do to accomplish your goal.

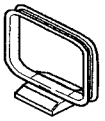
The manual has a table of contents to help you easily look up what you want to know.
We've enjoyed making this manual for you, and hope you will use it to enjoy the sound and many features built into your CA-MXG9BK.

Easy Guide

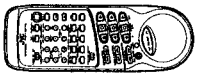
Getting Started

Check to be sure you have all of the following items, which are supplied with the CA-MXG9BK.

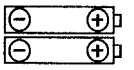
If anything is missing, contact your dealer immediately.



AM Antenna

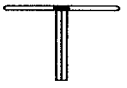


Remote Control

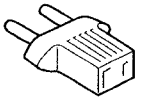


Batteries

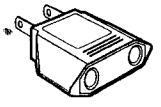
Antenna Adaptor



FM Feeder Antenna



type A



type B

AC Plug Adaptor

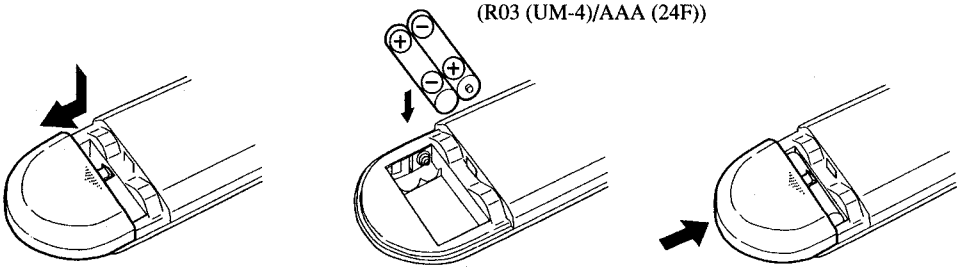
When the power plug is a flat blade type, the type A adaptor is supplied.
When the power plug is a round prong type, the type B adaptor is supplied.

IMPORTANT CAUTIONS

1. **Installation of the Unit**
   - Select a place which is level, dry and neither too hot nor too cold (between 5°C and 35°C).
   - Leave enough distance between the Unit and your TV to prevent interference.
   - Do not use the Unit in a place subject to vibration.
2. **Power cord**
   - Do not handle the power cord with wet hands!
   - When unplugging from the wall outlet, always pull the plug, not the power cord.
   - A small amount of power (16 watts) is consumed even in the STANDBY mode. To shut off the power completely, unplug the power cord from the outlet.
3. **Malfunctions, etc.**
   - There are no user serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
   - Do not insert any metallic object into the Unit.

Putting Batteries in the Remote

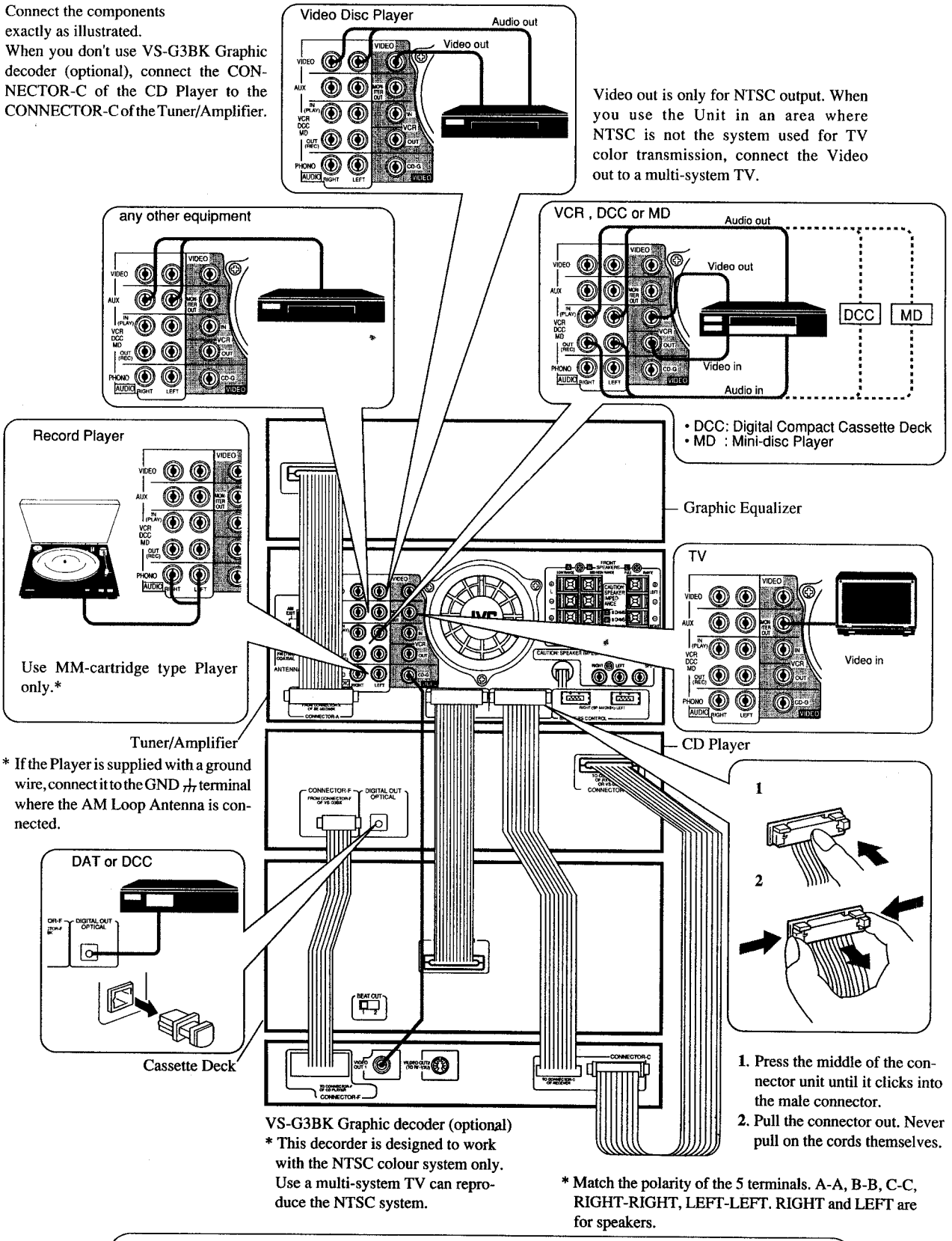
Pay close attention to getting the batteries in correctly—we've made it very easy, just match the + and – marks on the batteries with the + and – markings in the battery compartment.

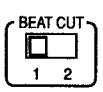


CAUTION: Observe Proper Handling of Batteries.
To avoid battery leakage or explosion:
- Remove batteries when the Remote will not be used for a long time.
- When you need to replace the batteries, replace both batteries at the same time with new ones.
- Don't use an old battery together with a new one.
- Don't use different types of batteries together.

Connecting the System Control Cords and Connecting Auxiliary Equipment

Connect the components exactly as illustrated.
When you don't use VS-G3BK Graphic decoder (optional), connect the CONNECTOR-C of the CD Player to the CONNECTOR-C of the Tuner/Amplifier.


Video Disc Player
Audio out
Video out
Video out is only for NTSC output. When you use the Unit in an area where NTSC is not the system used for TV color transmission, connect the Video out to a multi-system TV.
any other equipment
VCR , DCC or MD
Audio out
Video out
DCC
MD
Video in
Audio in
• DCC: Digital Compact Cassette Deck
• MD : Mini-disc Player
Record Player
Graphic Equalizer
TV
Video in
Use MM-cartridge type Player only.*
Tuner/Amplifier
CD Player
* If the Player is supplied with a ground wire, connect it to the GND ⏚ terminal where the AM Loop Antenna is connected.
DAT or DCC
Cassette Deck
1
2
1. Press the middle of the connector unit until it clicks into the male connector.
2. Pull the connector out. Never pull on the cords themselves.
VS-G3BK Graphic decoder (optional)
* This decorder is designed to work with the NTSC colour system only. Use a multi-system TV can reproduce the NTSC system.
* Match the polarity of the 5 terminals. A-A, B-B, C-C, RIGHT-RIGHT, LEFT-LEFT. RIGHT and LEFT are for speakers.



When recording an AM (MW/LW) broadcasting program, beat sounds may be heard and recorded.
Set the BEAT CUT selector to either 1 or 2, so that beat sounds will not be heard nor recorded.

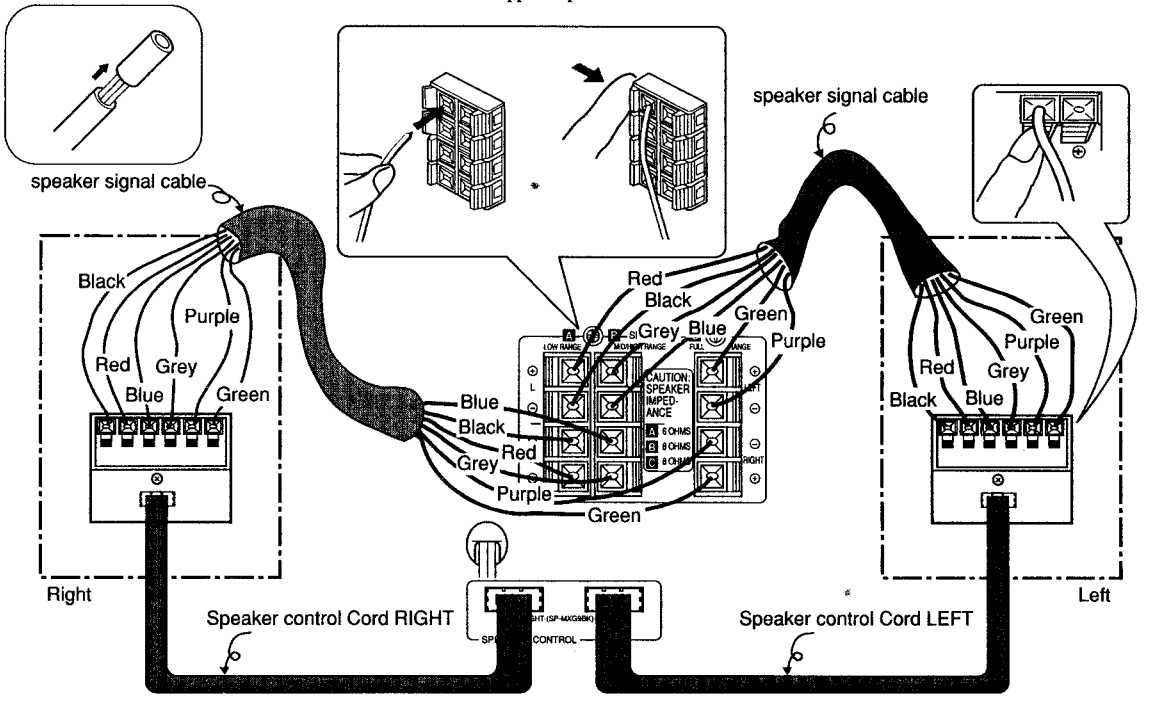
CAUTION: First make all connections before plugging the Unit into an AC power outlet.

Connecting the Front Speakers (Optional Speakers SP-MXG9BK)

Using DOLBY 3CH LOGIC mode (without center speaker)

For each speaker connect one end of the supplied speaker signal cable to the speaker terminals on the back of the CA-MXG9BK and one end to the speaker. On the back panel:

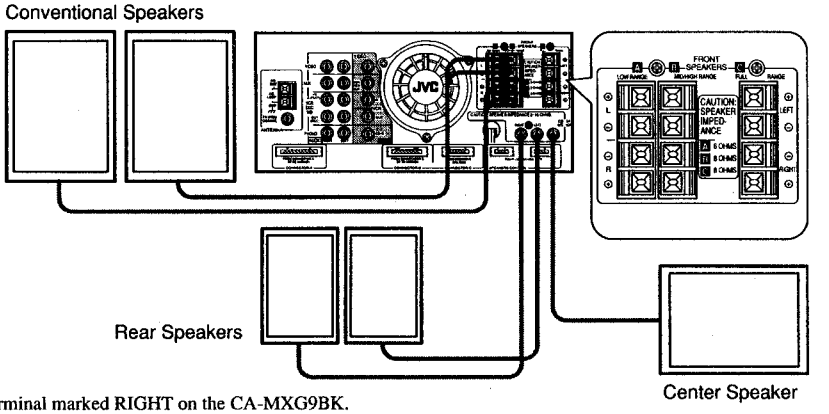
1. Open each terminal.
2. Insert the end of the speaker signal cable as shown (be sure to remove the insulation at the end of each wire first).
3. Close the terminals to clamp the speaker signal cables firmly in place.
4. Connect the black (–), red (+), blue (–), grey (+), purple (–) and green (+) terminals of the right side speaker to the black (–), red (+), blue (–), grey (+) terminals marked A, B **R**, purple (–) and green (+) terminals marked C **R** on the CA-MXG9BK.
   Connect the black (–), red (+), blue (–), grey (+), purple (–) and green (+) terminals of the left side speaker to the black (–), red (+) blue (–), grey (+) terminals marked A, B **L**, purple (–) and green (+) terminals marked C **L** on the CA-MXG9BK.
5. Connect SPEAKERS CONTROL RIGHT and LEFT with the supplied speaker control cords.



Connecting Rear Speakers and Center Speaker

Using DOLBY PRO LOGIC mode, 3CH LOGIC mode (with center speaker), and SEP. C mode

*** By connecting the Front Speakers, Rear Speakers and Center Speaker, you can use the various modes.**



Rear Speakers

- Connect the terminal of the right speaker to the terminal marked RIGHT on the CA-MXG9BK.
- Connect the terminal of the left speaker to the terminal marked LEFT on the CA-MXG9BK.

Note:You can use optional rear speakers SP-ES5BK.

Center Speaker

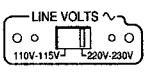
- Connect the terminal of the center speaker to the terminal marked CENTER SPEAKER on the CA-MXG9BK.

Note:You can only use a center speaker which has 8~16 ohms speaker impedance.

When you use your own speakers – Conventional Speakers

- Connect the (+) and (–) terminals of the right speaker to the grey (+) and blue (–) terminals marked B **R** on the CA-MXG9BK.
- Connect the (+) and (–) terminals of the left speaker to the grey (+) and blue (–) terminals marked B **L** on the CA-MXG9BK.

Note:You can only use B **R** *and* **L** *terminals to connect conventional speakers.*

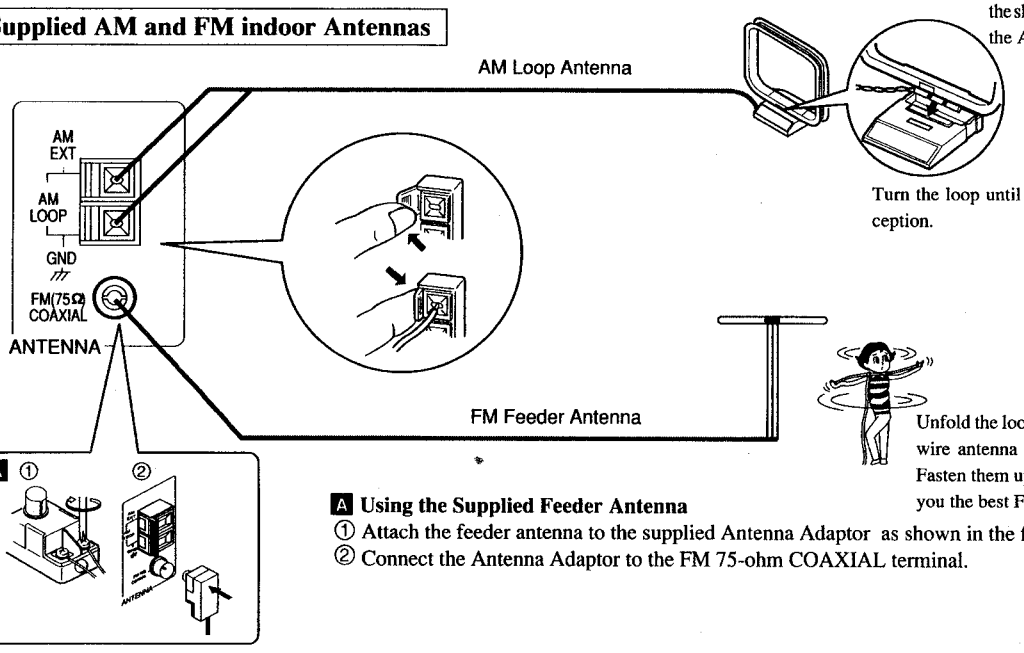


Set the VOLTAGE SELECTOR Switch

To avoid damaging the CA-MXG9BK, set the voltage before plugging in the unit.
Set the correct voltage for your area with the VOLTAGE SELECTOR switch on the back panel.
Use a slotted bit-screwdriver to set the selector so the number the same as the voltage where you are plugging in the Unit.

Connecting the AM and FM Antennas

Supplied AM and FM indoor Antennas



Snap the tabs on the loop into the slots of the base to assemble the AM loop.

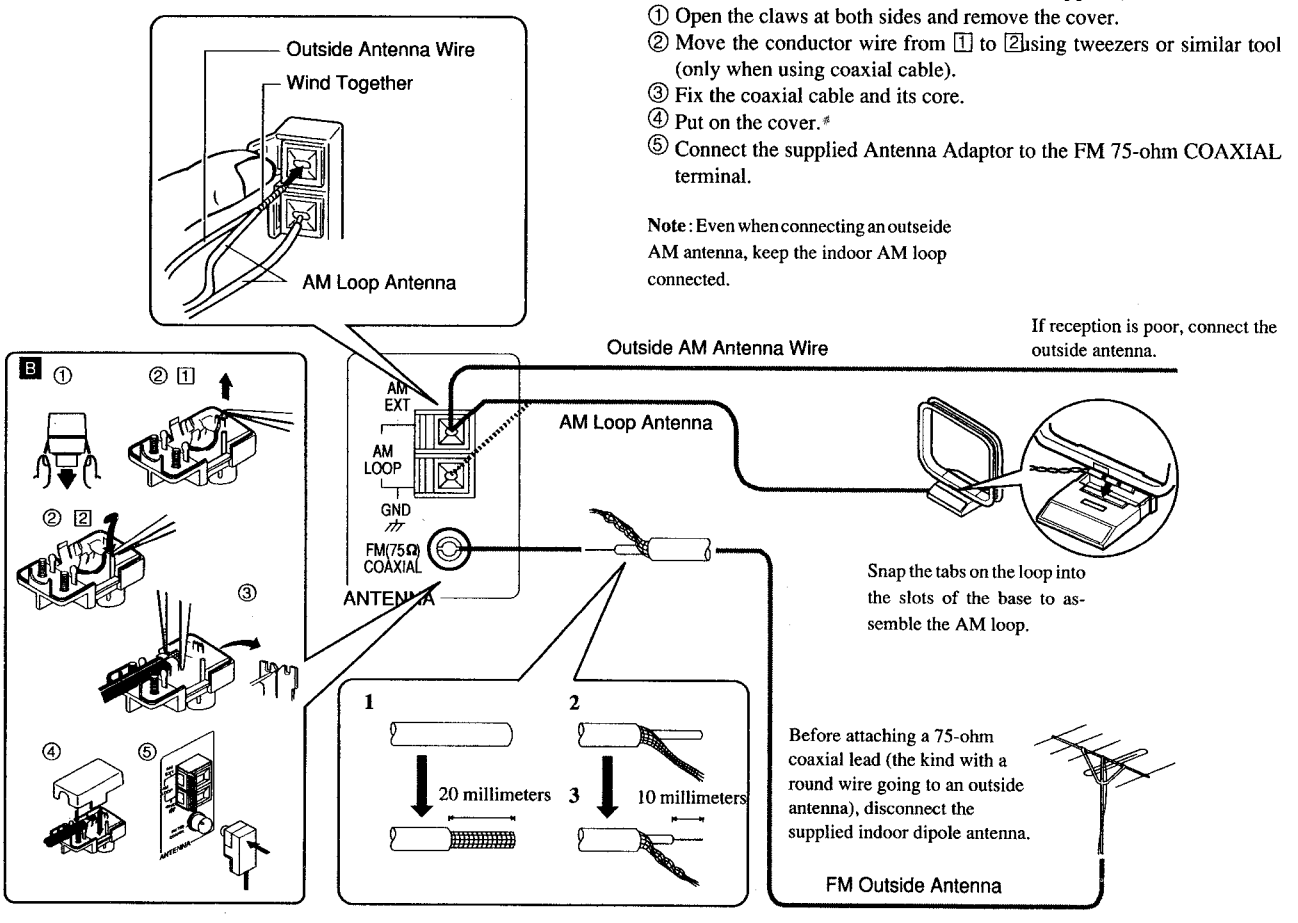
Turn the loop until you have the best reception.

Unfold the loops of the supplied dipole FM wire antenna and extend them as shown. Fasten them up in the position which gives you the best FM reception.

A Using the Supplied Feeder Antenna

① Attach the feeder antenna to the supplied Antenna Adaptor as shown in the figure.
② Connect the Antenna Adaptor to the FM 75-ohm COAXIAL terminal.

Outdoor Antenna Connections



B Using FM 75-ohm Antenna Cable (Not Supplied)

① Open the claws at both sides and remove the cover.
② Move the conductor wire from 1 to 2 using tweezers or similar tool (only when using coaxial cable).
③ Fix the coaxial cable and its core.
④ Put on the cover.*
⑤ Connect the supplied Antenna Adaptor to the FM 75-ohm COAXIAL terminal.

Note: Even when connecting an outseide AM antenna, keep the indoor AM loop connected.

If reception is poor, connect the outside antenna.

Snap the tabs on the loop into the slots of the base to assemble the AM loop.

Before attaching a 75-ohm coaxial lead (the kind with a round wire going to an outside antenna), disconnect the supplied indoor dipole antenna.

If reception is poor, connect an outside antenna.

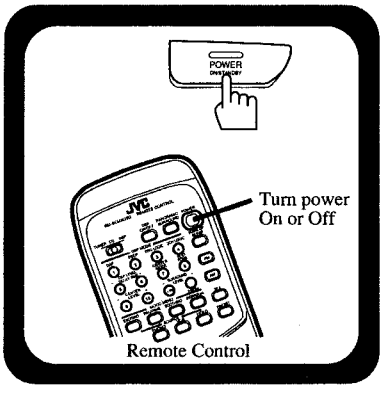
How to Strip the 75-ohm Coaxial Cable

1. Strip back the outside covering of the 75-ohm coaxial cable to expose the braided metallic mesh.
2. Pull the mesh back and twist into a single connector as shown.
3. Strip the insulation about 10 mm back from the central wire.
4. Attach to the supplied Antenna Adaptor, as shown in the diagram above.

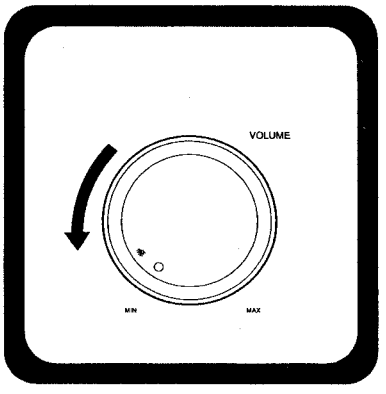
Turning on the Unit, Playing from a Tape, and Fast Winding or Rewinding

Turning on

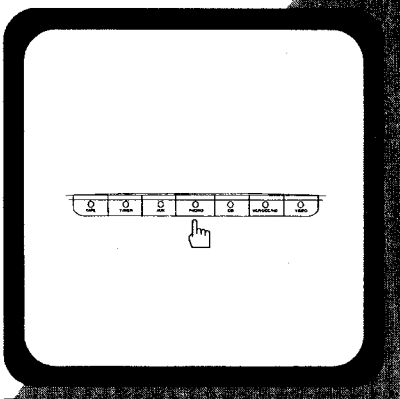
1. Press the POWER ON/ STANDBY button.
The LED on it goes off.



2. Turn down the VOLUME control completely.



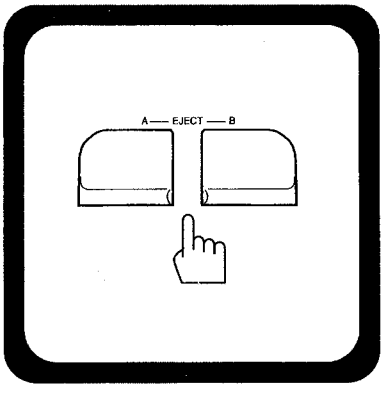
3. Start a source playing.



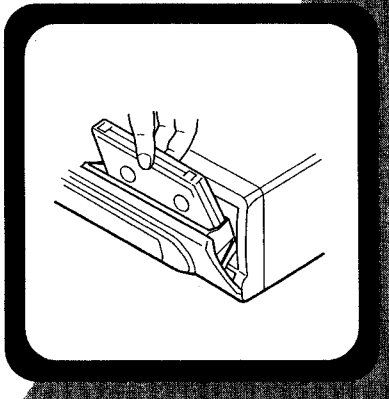
To turn off the unit:
Press the POWER ON/STANDBY button.
The LED on it lights up.

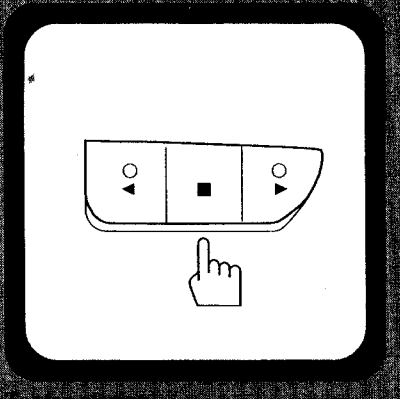
Playing a Tape

1. Press the EJECT button.



2. Put a tape in deck A or deck B.



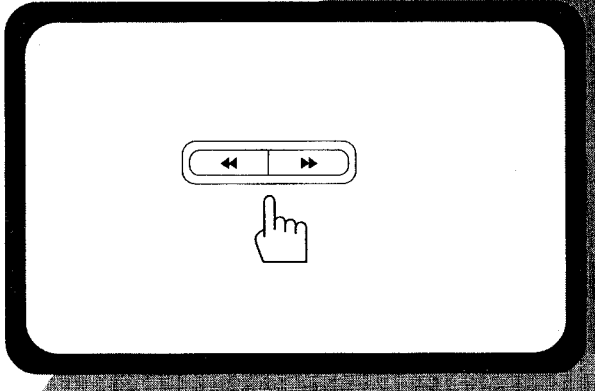


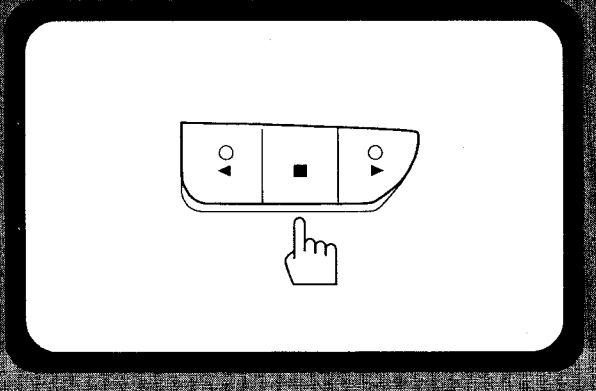
To stop playing:
Press the ■ button.

Fast Winding or Rewinding

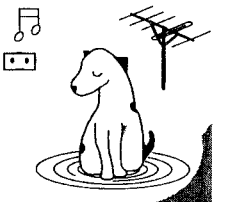
1. Press the ◀◀ or ▶▶ button.

To stop Fast Winding or Rewinding:
Press the ■ button.





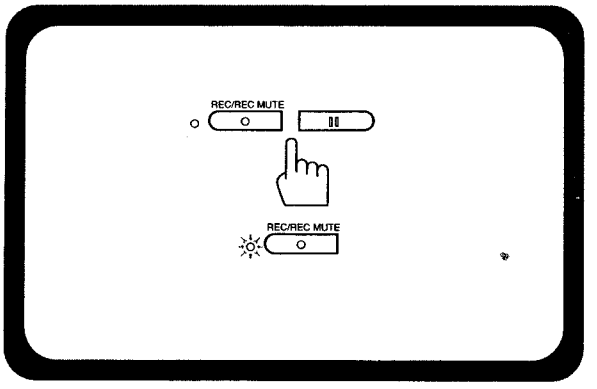
Note: To play a tape recorded with Dolby NR effect, see page 21 of the Features Guide section.



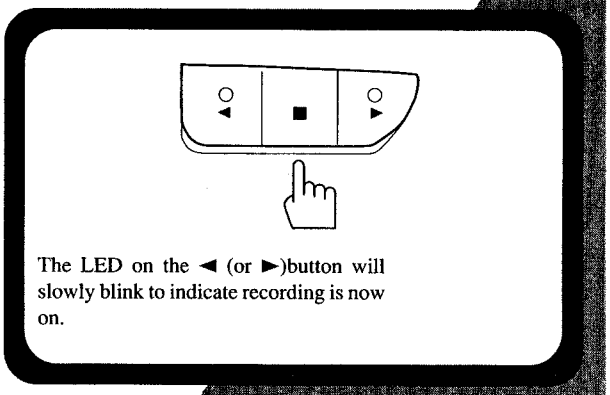
Recording onto a Tape, Receiving Radio Broadcasts, and Playing CDs

Recording onto a Tape

1. Press the REC/REC MUTE O button and the II button simultaneously.
The LED next to them lights up and the Unit will be in recording pause.



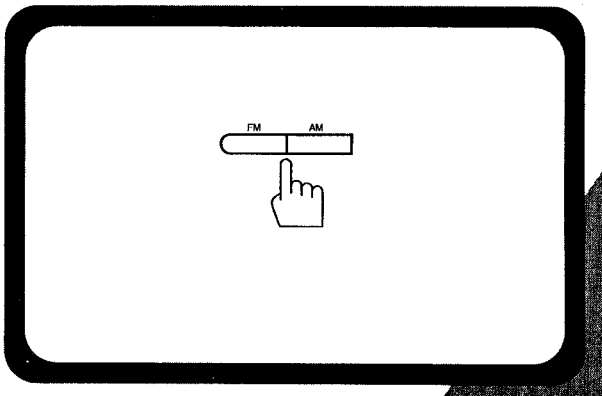
2. Start playing the source you want - CD, Radio, etc.
Press the ► (or ◄) button, depending on which side of the tape you want record on, to start recording.



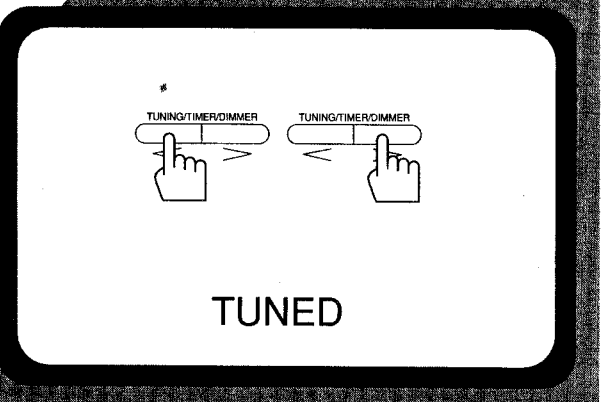
The LED on the ◄ (or ►)button will slowly blink to indicate recording is now on.

Receiving Radio Broadcasts

1. Press the FM or AM button to select the band.

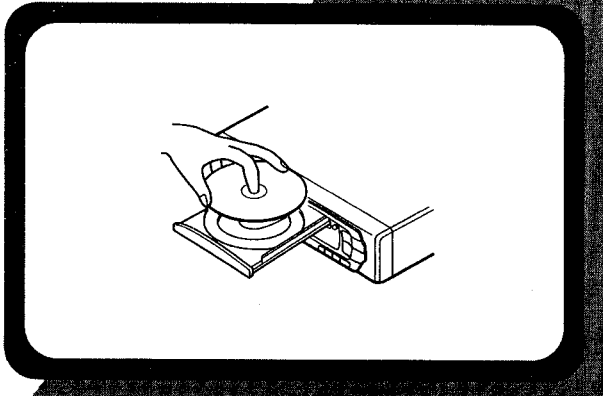


2. Press the TUNING/TIMER/DIMMER < or > button to tune in the desired stations.
When the Unit tunes in the station, TUNED lights up on the display.

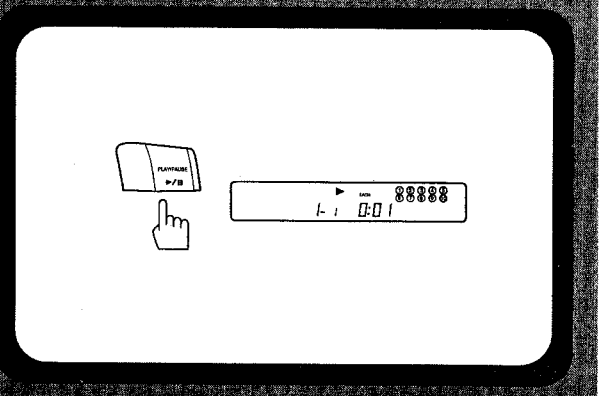


Playing CDs

1. Press the ▲ OPEN/CLOSE button . Load a CD on the tray.

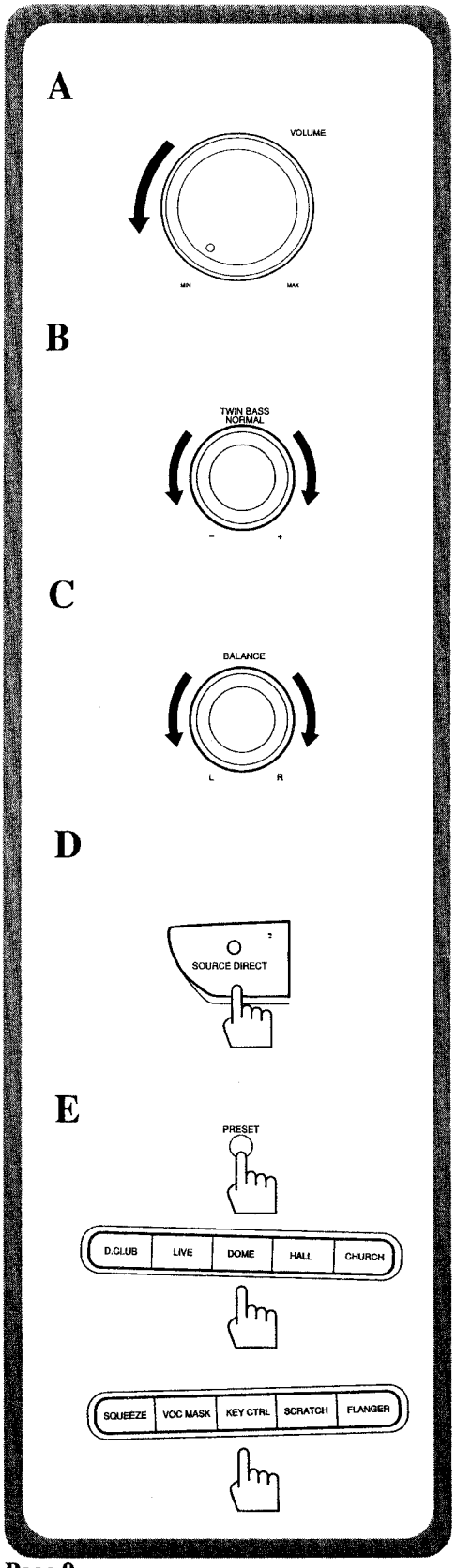


2. Press the PLAY/PAUSE ►/II button.
The CD starts playing.



Features Guide

Features



A. Volume Control

CAUTION: Always set the VOLUME control to MIN before turning on a connected source such as a VCR or Record Player, or starting any of the other sound sources such as the radio, tape, or CD player. If the VOLUME control is left turned up, the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

STEREO ETIQUETTE

Have consideration for others.

Set the volume to a level which will not disturb others. At night, the CA-MXG9BK can still be enjoyed at low volume levels. Close the window or use headphones to avoid disturbing others.

B. Bass Control

You can reduce or increase the amount of Bass reinforcement by adjusting the TWIN BASS control. When set to the NORMAL position, no bass reinforcement is applied.

C. Balance Control

If the sounds you hear from the right and left speakers are unequal, you can adjust the speaker output balance with the BALANCE control.

D. High-fidelity Playback

When the SOURCE DIRECT button is pressed, the LED on the button comes on and "DIRECT ON" appears on the display. By bypassing the GRAPHIC EQUALIZER's effects, the path of the audio signal will be shortened, giving a higher fidelity sound.

E. Special Effects Controls:

SEA Preset Pattern, Panoramic Surround mode, DSP Programs (Dolby Pro Logic, DAP, DSEP)

Experiment with and set your special effects. If you don't want to use the effect, just press the DSP button. "DSP OFF" appears on the display.

SEA:

When the PRESET button is pressed, the LED on the SEA button also comes on. Each time you press the PRESET button, the SEA pattern will change. If you don't want to use the effect pattern, just press the SEA button, and when the LED goes off, so does the SEA effect.

DOLBY PRO LOGIC:

When either the PRO LOGIC or 3CH LOGIC button is pressed, the LED on the DSP button also comes on, and "PRO LOGIC" or "3CH LOGIC" appears on the display. To turn off the PRO LOGIC effects, just press the DSP button.

DAP: Digital Acoustic Processor

When the DAP mode buttons are pressed, the LED on the PANORAMIC SURROUND button and the DSP button also comes on. If you don't want to use the effect pattern, just press the DSP button.

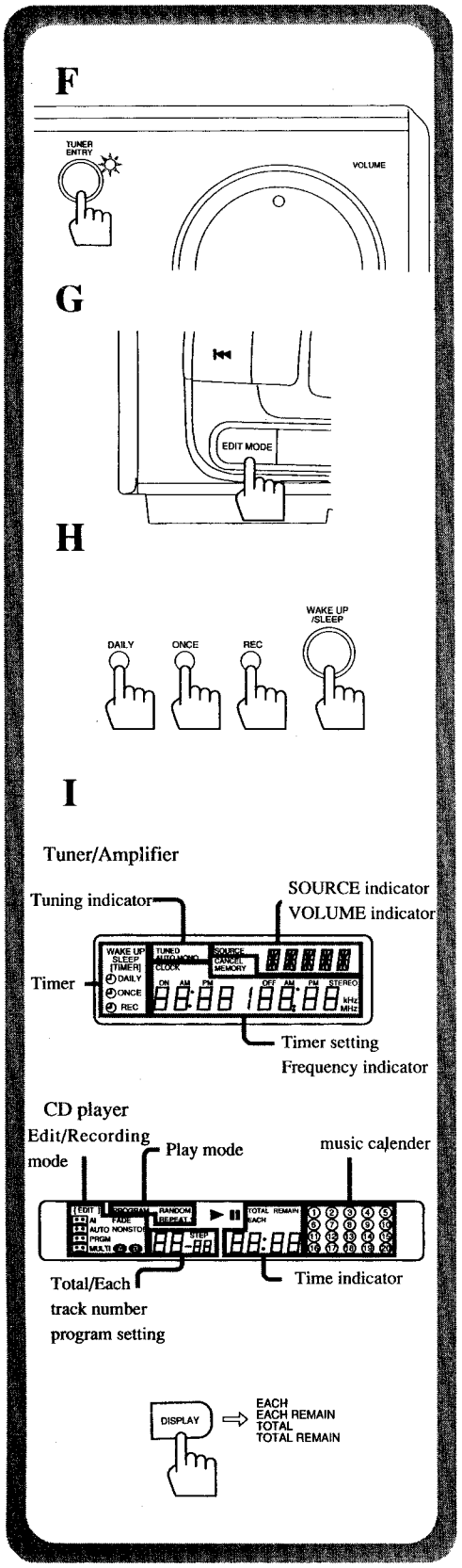
DSEP: Digital Special Effects Processor

When the DSEP mode buttons are pressed, the LED on the DSP button also comes on. If you don't want to use the effect pattern, just press the DSP button.

- You can't use the DAP effect and the DSEP effect at the same time.

Panoramic Surround:

When the PANORAMIC SURROUND button is pressed, the LED on the button comes on. The angle of the Optional Panoramic shifting speakers will shift in accordance with the DSP modes. To turn off a Panoramic Surround effect, just press the PANORAMIC SURROUND button again. When the LED goes off, so does the Panoramic Surround effect. When you want to cancel the DSP mode, press the DSP button. The LED on the button goes off.



F. Using the Tuner Entry Function (Tuner/Amplifier)

With Tuner Entry on, the Unit automatically shifts to the most recently played radio station when a tape or CD comes to an end.(See Page 28)

- Press the TUNER ENTRY button. The LED next to it lights up when Tuner Entry is on and is off when Tuner Entry is off.
- In two situations, even if Tuner Entry is on, it will not take effect:
  1) When you intentionally stop the CD or tape deck by pressing the STOP/CLEAR ■ button on the CD player or the ■ button on the tape deck.
  2) When any timer activated CD or tape stops playing.

G. Using the Edit Functions (CD Player)

By using one of the four Edit Functions, AI Edit, Auto Edit, Program Edit and Multi Edit, the Unit can figure out how to arrange CD tracks on a tape. When you are recording a tape from a CD, the selections are not cut off if the tape ends before the selection does.

H. Using the Timers (Tuner/Amplifier)

The four timers, REC TIMER, ONCE TIMER, DAILY TIMER and WAKE UP/SLEEP TIMER are extremely easy to set so you can really use them.

I. The Display and the LEDs—Two Very Useful Hints

- The display area is large and clear. It's organized so you can tell at a glance what's happening because functions light up as you use them, and blink to tell you when they are ready.
- Some of the controls have a small light, called an LED right next to or even right on the function button or knob itself. The light comes on when the function is on, and goes out when it is not in use.

DIMMER Function (Tuner/Amplifier)

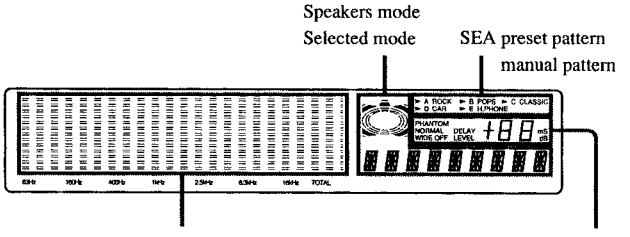
With this function you can control the display brightness, when the Unit is turned off.

Press the TUNING/TIMER/DIMMER < or > button.

<: makes the display dimmer

>: makes the display brighter

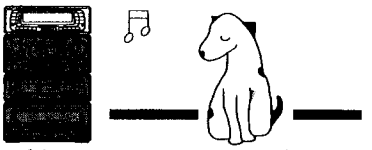
Graphic Equalizer



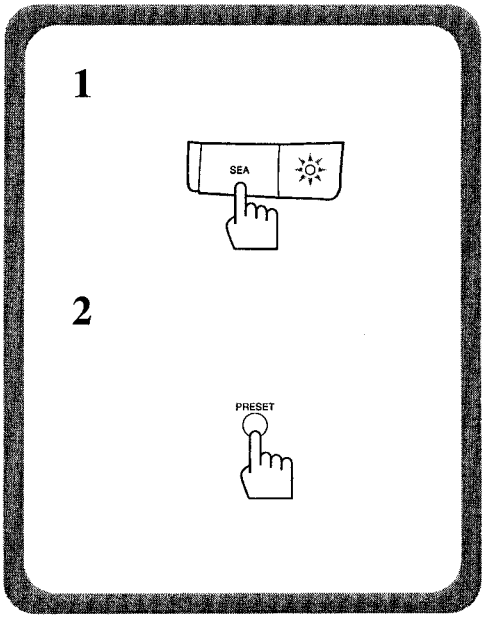
Listening with Headphones

A standard pair of headphones can be connected at the PHONES jack on the front panel. **Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.**

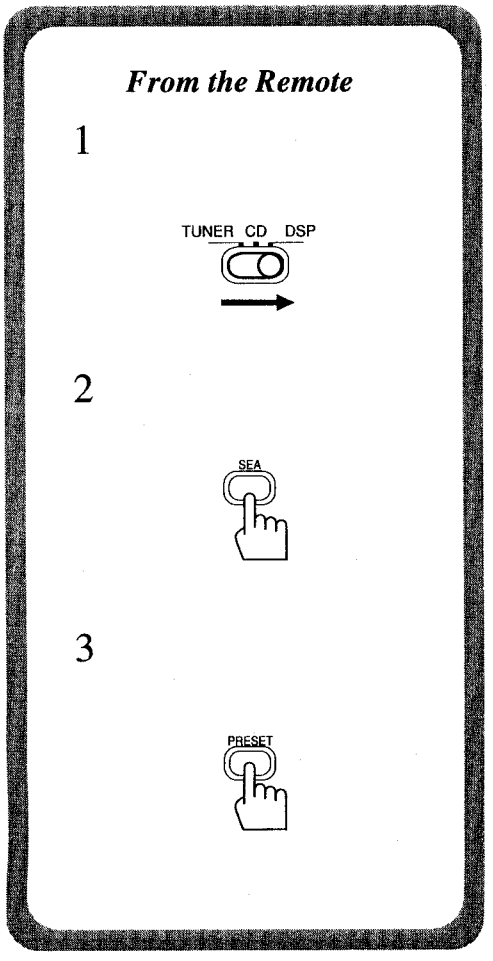
Adjusting the Sound



SEA preset patterns: SEA allows you to select one of five pre-programmed sound patterns (preset mode) or to create your own sound patterns (manual mode).



From the Remote

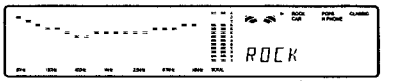


Using the SEA Preset Patterns

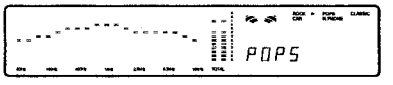
1. **Press the SEA button (or simply press the PRESET button).**
   The LED next to it comes on.

2. **Press the PRESET button to select the SEA preset pattern you want.**
   Each time you press the PRESET button, the display changes from one pattern to the next as shown below.

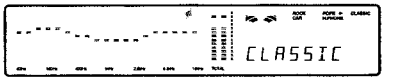
ROCK — Increases both treble and bass sounds.



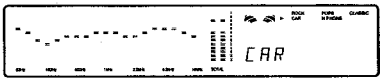
POPS — Increases the richness and fullness of the vocal sound.



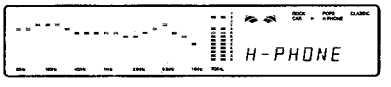
CLASSIC — Adds depth and brilliance to the sound.



CAR — For recording onto car stereo tapes.



H.PHONE — For recording onto headphone stereo tapes.

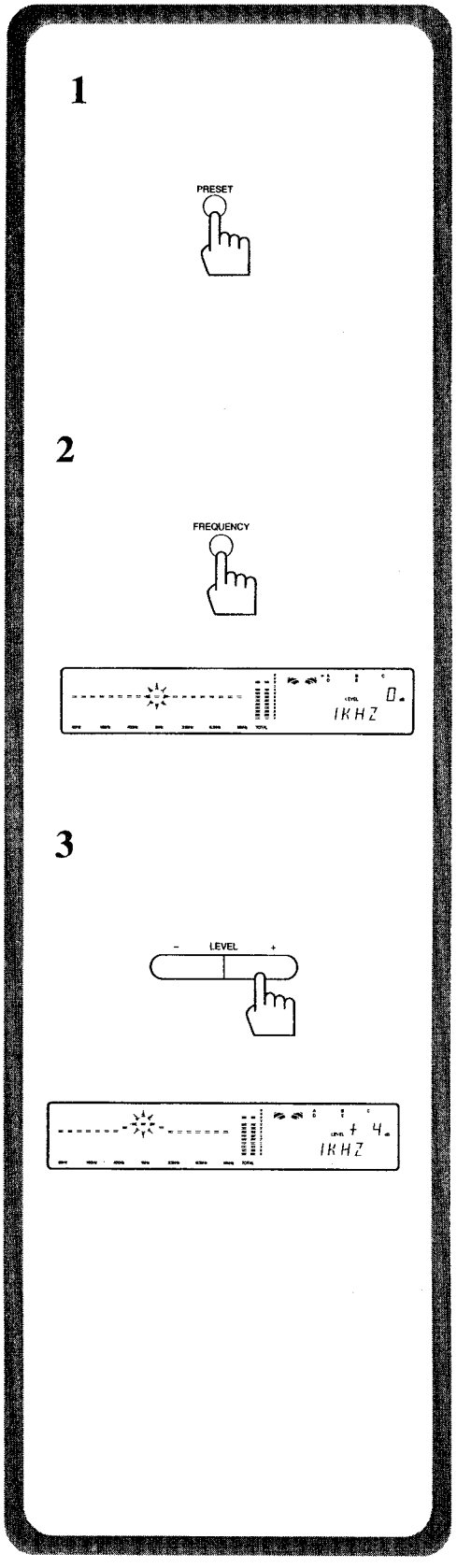


You can also use the Remote to select the SEA patterns.

1. Set the TUNER/CD/DSP selector to the DSP position.
2. Press the SEA button to enter the SEA mode.
3. Press the PRESET button to select the SEA pattern.

To cancel the SEA effect, press the SEA button (or the SEA ON/OFF button on the Remote) again.

To get back the cancelled effect, select the cancelled pattern again.



Creating Your own SEA Patterns

1. **Press the PRESET button to select the manual mode.**
   The LED next to it lights up.

2. **Press the FREQUENCY button to set the frequency range to be changed.**
   The frequency range level bar on the display will blink.
   Each time you press the FREQUENCY button, the frequency range changes up or down. While it is blinking you can set the frequency level.

3. **Press the – LEVEL + button to set the level,while the selected frequency range level bar is blinking.**

4. **Repeat steps 2 and 3 to adjust other frequency ranges.**
   You can adjust 7 frequency ranges.

Note
Although the five SEA preset patterns cannot be changed, an individual sound pattern can be created based on a preset pattern. When you make any change to the SEA preset pattern, the Unit automatically enters the manual mode so you can modify and store the pattern you create.

To store the pattern

1. Press the MEMORY button after creating your own SEA pattern.
   Whole ranges on the display will blink.

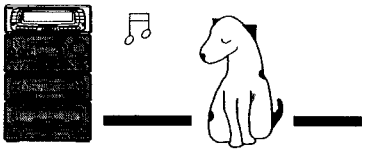
2. While the ranges are blinking, press the PRESET button to select the memory MANUAL A, B, C, D, or E.

3. Press the MEMORY button again to store the pattern in memory.
   When the pattern appears on the display, it is now stored.

Recording the SEA Sound Pattern
To record sound together with a SEA sound pattern (either a preset or manual one), first turn on SEA and select the desired sound pattern. The music will be enhanced according to the pattern you selected. SEA sound patterns cannot be applied to the following types of recording:

- A song cannot be dubbed (at either normal or high speeds)with a SEA sound pattern.
- When the amplifier's SOURCE DIRECT is ON, songs cannot be recorded with a SEA sound pattern.

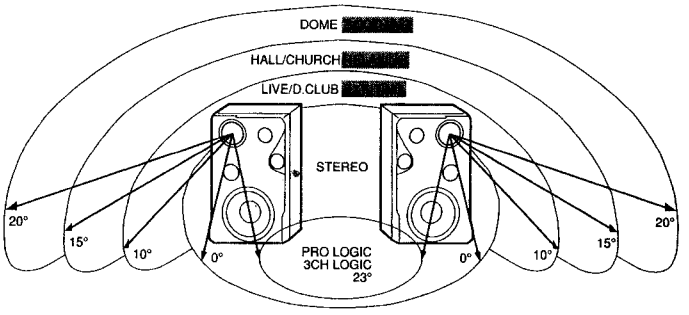
Using DSP (Digital Signal Processor) Programs



You can use Dolby Pro Logic mode or 3ch Logic mode. You can use these two modes either with or without a single center speaker. When using without a center speaker, you can change the panoramic shifting speakers inside the cabinet to function like the center speaker. The speakers shift according to the respective DAP program.

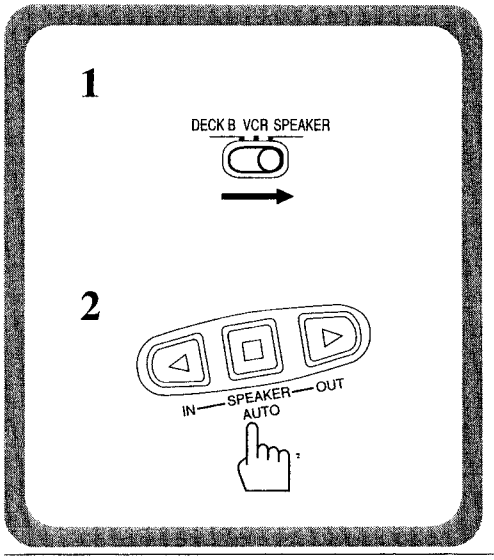
Changing the Speaker Angle

The CA-MXG9BK has 12 DSP programs: Dolby Pro Logic, Dolby 3ch Logic, DAP Programs (D.CLUB, LIVE, DOME, HALL, CHURCH), DSEP Programs (SQUEEZE, VOCAL MASKING, KEY CONTROL, SCRATCH, FLANGER). With these programs and the panoramic shifting speakers (Optional) the sound field can be enlarged to give a more realistic sound. You can choose the sound atmospheres from the following DSP programs.



Notes

- *Panoramic shifting speakers inside the cabinet will shift corresponding to the respective DAP mode. The speakers shift automatically inward or outward to give you the dynamic sound fields. The mode can be set from either the Unit or the Remote.*
- *In the Dolby Pro Logic mode, the speakers will shift inward to give a same effect as if you are using a center speaker and make the spoken words easier to hear.*
- *Normally, the speakers face directly forward.*



To change the speaker angle from the Remote.

1. **Set the DECK B/VCR/SPEAKER selector to the SPEAKER position.**
2. **Press the IN/OUT button to change the angle.**
   The indicator will blink to indicate the speaker's direction of movement.
   - Press the IN button to shift the speakers inward.
   - Press the OUT button to shift the speakers outward.
   - Press the AUTO button to shift the speakers automatically in accordance with the DSP program selected.

   When you change the angle of the speakers by using the IN or OUT button, the last selected angle is memorized. To cancel the memorized speaker angle, press the AUTO button.

Notes

- *You can apply DAP modes when you record.*
- *A sound cannot be dubbed with the DAP modes (at either normal or high speeds).*

To cancel Panoramic Surround mode

You can turn off Panoramic Surround mode from either the main Unit or the Remote. Just press the PANORAMIC SURROUND or DSP button.
ON: the indicator on the main Unit lights up.
OFF: the indicator on the main Unit goes off.

Dolby Pro Logic

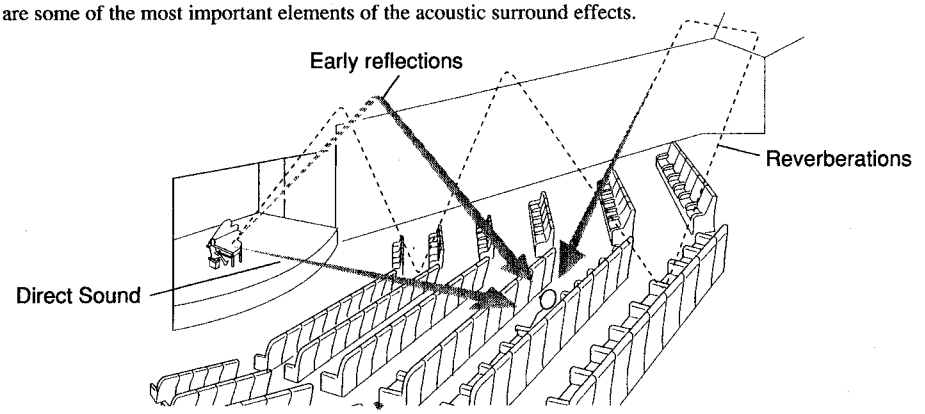
DOLBY PRO LOGIC: By connecting the optional rear speakers (SP-ES5BK) the sound reflections and the reverberations enhance the effect of movement, so you can feel as if you were in the actual scene.
DOLBY 3CH LOGIC: Select this mode when you are not using the rear speakers.
Try listening to the source in various sound modes. By using the Remote you can stand back and hear the sound differences as you change modes. By altering the settings of the following three modes you can adjust the sound to suit speaker size and the acoustic conditions of the room.

- CENTER MODE (PHANTOM/NORMAL/WIDE/OFF): When you use the DOLBY 3CH LOGIC mode, only NORMAL, WIDE, or OFF appear on the display.
- DELAY TIME (PRO LOGIC only)
- TEST TONE (CENTER LEVEL –∞, –12 ~ +6dB), (SURROUND LEVEL –∞, –12 ~ +6dB): On the display, –∞ is indicated as "---".

In Dolby Pro Logic mode, the panoramic shifting speakers shift inwards pointing the center. Accordingly, they give you the same effect as if you are using a single center speaker. When you also want to hear the sound from the center speaker, you can connect a conventional center speaker to the terminal on the rear of the CA-MXG9BK.
Once you have set the mode, you can enter in the mode directly every time you want to enjoy the Dolby sound, as long as you don't change the speakers or the listening room.
The soundtracks of video software bearing the DOLBY SURROUND mark* include the same encoded surround information as found in Dolby Stereo films. The Dolby Pro Logic Surround decoder is a consumer version of the decoding process used in professional Dolby Stereo equipment, which lets you recreate the theater ambience and effects of Dolby Stereo at home.

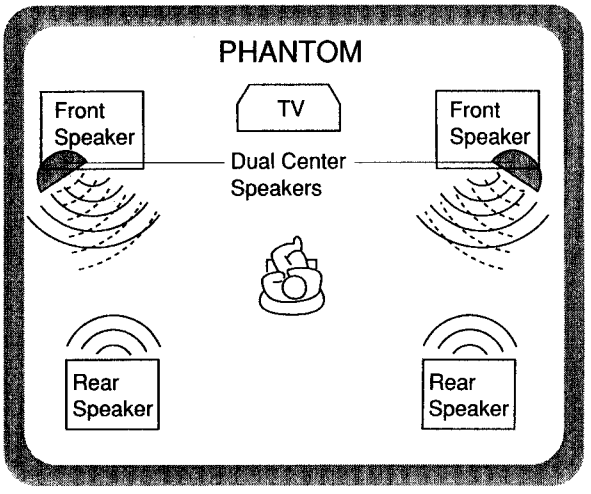
* *Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

The sound heard in a concert hall or a movie theater consists of direct sound and indirect sound: early reflections and reverberations. The reflected sound and the reverberative sound are always delayed by the distances of the ceiling, walls from the listener. The early reflections and reverberations are some of the most important elements of the acoustic surround effects.

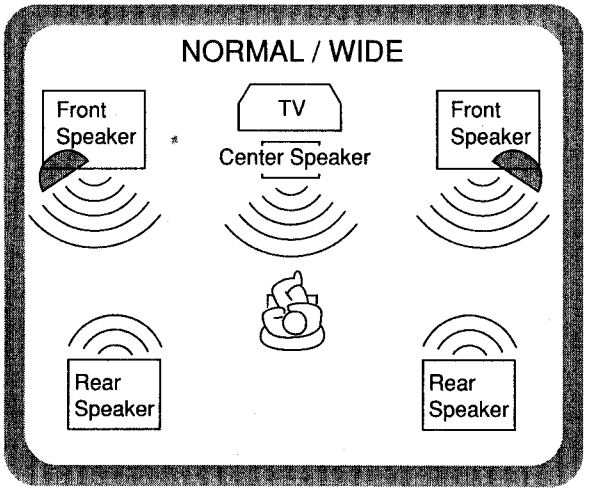


In addition to the Front Speakers and Rear Speakers, a center speaker is required for the optimum surround effect of the Dolby Pro Logic system. When you use a video or other sound source processed with the Dolby surround system labeled with the DOLBY SURROUND, set the center speaker in front of the TV. However, even if without a center speaker, you can use the PHANTOM mode within the DOLBY PRO LOGIC mode and the panoramic shifting speakers will reproduce the center speaker effect.
The following illustrations show how the CA-MXG9BK can give you the optimum sound environment by selecting the various sound modes and speaker arrangements. Try to find the speaker direction and location to create the optimum sound field.

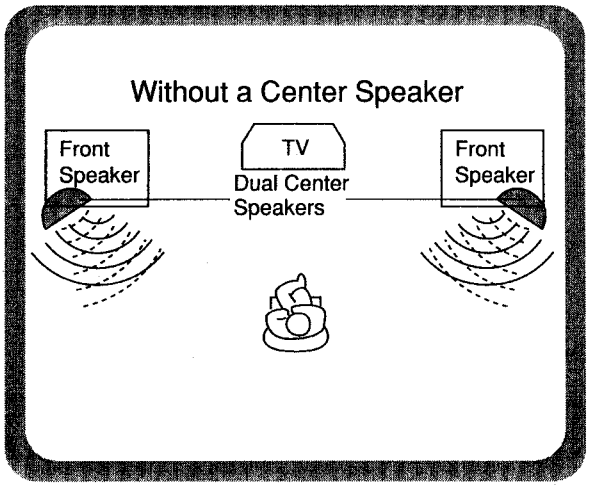
DOLBY PRO LOGIC
(Front Dual Center Speaker)



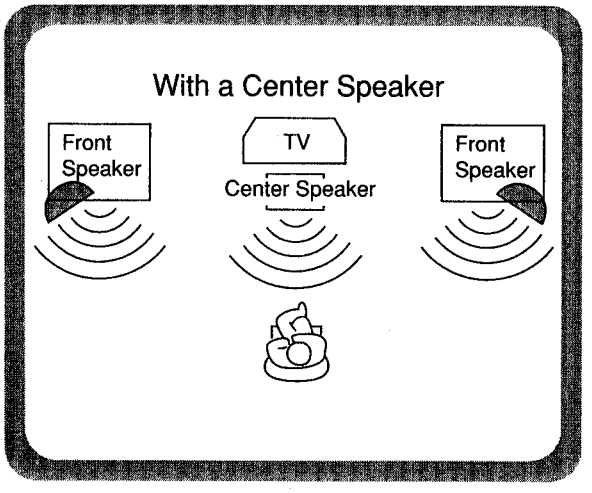
DOLBY PRO LOGIC
(Separate Center Speaker)

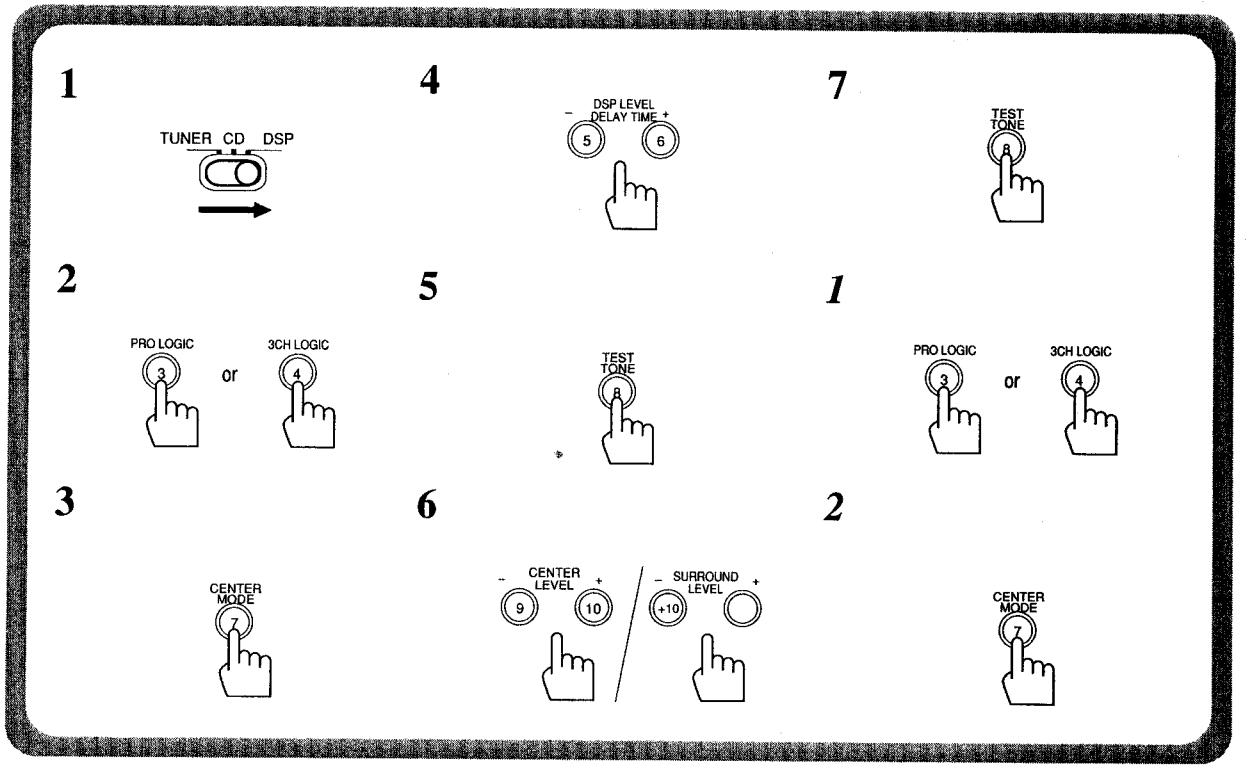


DOLBY 3CH LOGIC
(Front Dual Center Speaker)



DOLBY 3CH LOGIC
(Separate Center Spaker)





PREPARATION FOR USING DOLBY PRO LOGIC

1. **Set the TUNER/CD/DSP selector on the Remote to the DSP position.**

2. **Press the PRO LOGIC or the 3CH LOGIC button to set the mode.**
   When you use the surround speakers, press the PRO LOGIC button.

3. **Press the CENTER MODE button.**
   Each time you press the CENTER MODE button,the mode changes as follows.

PHANTOM	Select this mode when you don't use the center speaker.
NORMAL	Select this mode when you use the small size center speaker.
WIDE	Select this mode when the size of the center speaker is same as the that of the main speakers.
OFF	You can shut off the output of the center channel signal.

- Select the NORMAL mode when you use the panoramic shifting speakers (optional).
- Press the 4CH/SEP.C button (the indicator lights up) to set the separate center mode when you use other center speaker separately than panoramic shifting speakers (optional).

4. **Press the –DELAY TIME+ button to set the delay time of the speakers' output.**
   You can adjust the delay time every 1ms between 15ms and 30ms.
- When the surround speaker is located far from your listening position as compared to that of the mainspeakers, you can set the delay time of the sound from the surround speakers.
  ex.

Distance	Set to
far	15ms
same	20ms
near	30ms

5. **Press the TEST TONE button to check your setting.**
   When you press the button, the mode changes automatically as follows , and you can check the tone from each speaker.

6. **Press the –CENTER LEVEL+ button to set the sound level of the main speakers.**
   Press the –SURROUND LEVEL+ button to set the sound level of the surround speakers.
- Set each sound level from the main and surround speakers to the same level.

  - You cannot set the surround level when you select the 3CH LOGIC mode.
  - You cannot set the center level when you select the PHANTOM or OFF mode of the CENTER MODE.

7. **Press the TEST TONE button to finish the preparation.**
   The test tone shuts off.

Now you can use the Dolby Pro Logic mode. Let's listen to the sound effect!

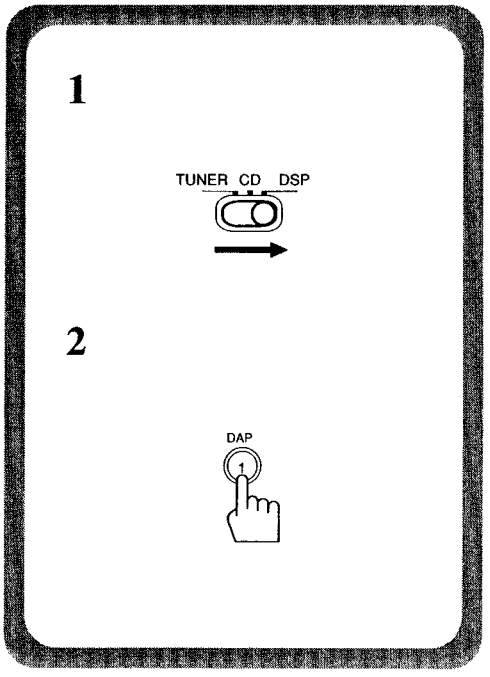
1. ***Press either the PRO LOGIC or 3CH LOGIC button.***

2. ***Press the CENTER MODE button.***

3. ***Play a sound source processed with the Dolby Surround System on which the DOLBY SURROUND mark is labeled.***
   The panoramic shifting speakers will shift inward to reproduce realistic voice and sound effects.

DAP (Digiral Acoustic Processor) Mode

A room has its own pattern of reflections and reverbrations determined by its size, the height of the ceiling, construction and other factors. In the DAP mode, sound from the speakers reflects from the walls and ceiling, enveloping you with spatial sounds from random directions. With five DAP modes the sound field can be enlarged to give a more realistic atmosphere without adding rear speakers.



The Remote is very useful for making this setting.

1. **Set the TUNER/CD/DSP selector to the DSP position.**

2. **Press the DAP button to select the mode.**
   Each time you press the DAP button, the mode changes as follws.

D. CLUB	gives a throbbing bass beat.
LIVE	gives the feeling of a live stage.
DOME	gives the spacious feeling of a domed stadium.
HALL	gives clear vocals and the feeling of a recital hall.
CHURCH	reproduces the echo effect of a stone-walled church.

   (When you use the main unit, just press the desired DAP mode button directly.)

To change the depth of effects

Press the –DSP LEVEL+ button on the Remote. You can change the depth level every 1dB between –6dB and +6dB. 0dB is the normal level.

+: the level is increased.
–: the level is decreased.

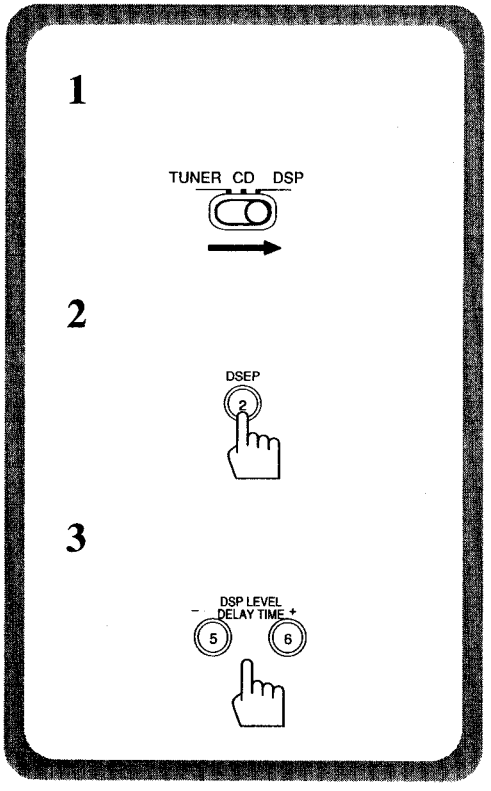
When you use the rear speakers

Press the 4CH/SEP.C button.
The LED next to it lights up.

Although you can reproduce the sound with a DAP or DSEP effect by using only the front speakers, adding the optional rear speakers will enhance the effect. (In this case, the panoramic shifting speakers turn off.)

DSEP (Digital Special Effects Processor) Mode

With five DSEP modes a powerful sound can be reproduced.
The panoramic shifting speakers inside the cabinet shift to face directly forward in alignment with the full-range speakers directly below.The mode can be set either on the Unit or from the Remote.



The Remote is very useful for making this setting.

1. **Set the TUNER/CD/DSP selector to the DSP position.**

2. **Press the DSEP button to select the DSEP mode.**

SQUEEZE	gives clear and realistic vocal sound
VOC MASK	the singers voice in the sound source is reduced.
KEY CTRL	you can freely change the tone level.
SCRATCH	creates scratching noise while you press and hold the button.
FLANGER	gives a sound like a dynamic parallel wave.

   (When you use the main unit, just press the desired DSEP mode button directly.)

3. **Press the –DSP LEVEL+ button to change the sound level.**

SQUEEZE:	5 level (–2 ~ +2)
VOC MASK:	13 level (–6 ~ +6)
KEY CTRL:	13 level (–6 ~ +6)
SCRATCH:	(–1 and +1)
FLANGER:	5 level (–2 ~ +2)

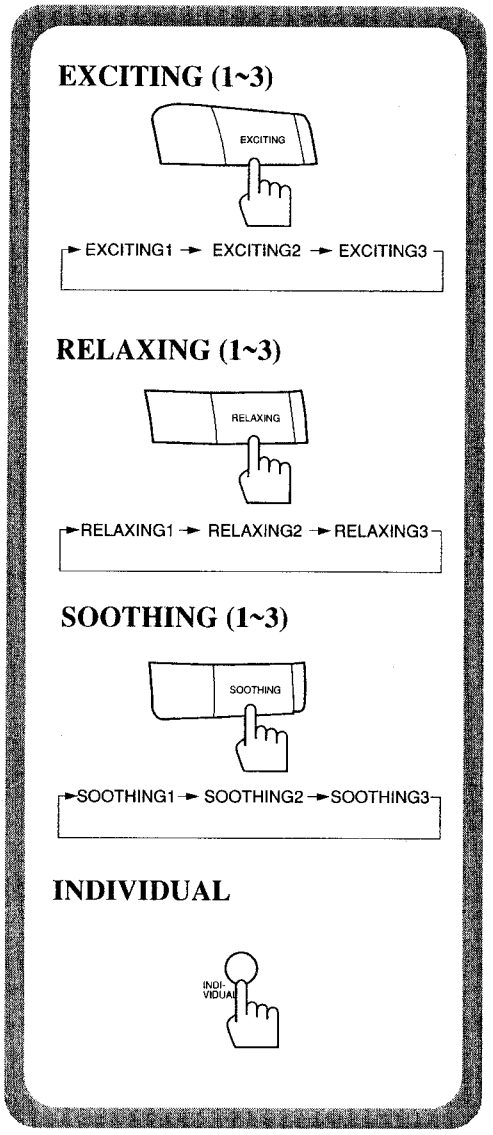
Notes on the DAP and DSEP programs

- *When 4CH/SEP.C is ON, the sound is recorded with DAP or DSEP effect.*
- *When 4CH/SEP.C is ON, you can not dub with either Normal speed or High speed.*
- *When you use the DAP or DSEP effect by using the headphone, turn the 4CH/SEP.C ON.*

Special Sound Adjustment

Mood Menu

The Mood Menu allows you to select one of four special effect sound modes. Selecting a mode will set the respective SEA pattern, DSP programs, and panoramic shifting speaker angle automatically. The individual mode allows you to store your own settings in memory.



EXCITING (1~3)

Press the EXCITING button.

Regardless of the music source, a sharp, upbeat sound is produced. Each time you press the button, the depth of the effect changes among 3 grades.

RELAXING (1~3)

Press the RELAXING button.

A beautiful, subtle sound is obtained. The sound feels like a refreshing breeze which gives a relaxed feeling.

Each time you press the button, the depth of the effect changes among 3 grades.

SOOTHING (1~3)

Press the SOOTHING button.

By controlling the dynamic range, a rich, easy listening sound can be maintained. Low-volume sounds drowned out by larger-volume sounds are boosted and peak sounds are suppressed.

Each time you press the button, the depth of the effect changes among 3 grades.

INDIVIDUAL

Press the INDIVIDUAL button so that the stored setting is called up.

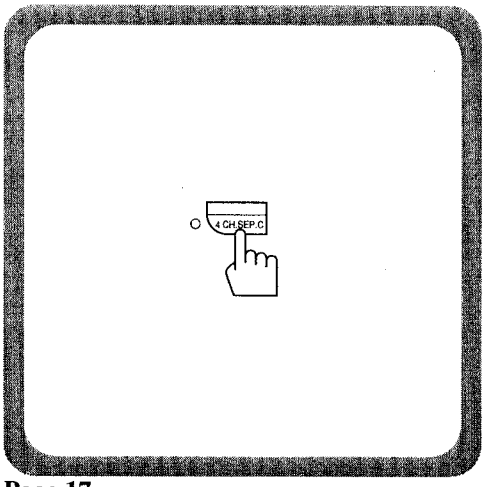
You can use the individual mode to create your own customized sound effect by combinating one of the DSP programs (Dolby Pro Logic, DAP, and DSEP) and one of the SEA patterns. The individual mode settings can be stored in memory.

Notes

- *Do not keep the INDIVIDUAL button pressed to call up the stored setting; otherwise, you may store a new setting rather than calling up the previous one (see below).*
- *When you store only the SEA MANUAL pattern, the display shows only the MANUAL indicator.*
- *When you press the SOOTHING button, the LED on the PANORAMIC SURROUND button goes off.*

To store your own customized DSP mode into the INDIVIDUAL mode

1. Select the desired DSP mode. (See page 13–16)
2. Adjust the frequency range.(See page 12)
3. Press and hold the INDIVIDUAL button to store your own pattern.



Using 4CH/SEP. C (4 Channel Separate Center)

With the 4CH/SEP. C button, you can control the following settings.

- Setting the 4CH (front and rear speakers) or 2CH (front speakers only) in the DAP mode.
- Setting the separate center in the Dolby Pro Logic mode.
- Recording the source with a DAP or DSEP effect.

Press the 4CH/SEP. C button.

The LED next to it lights up.

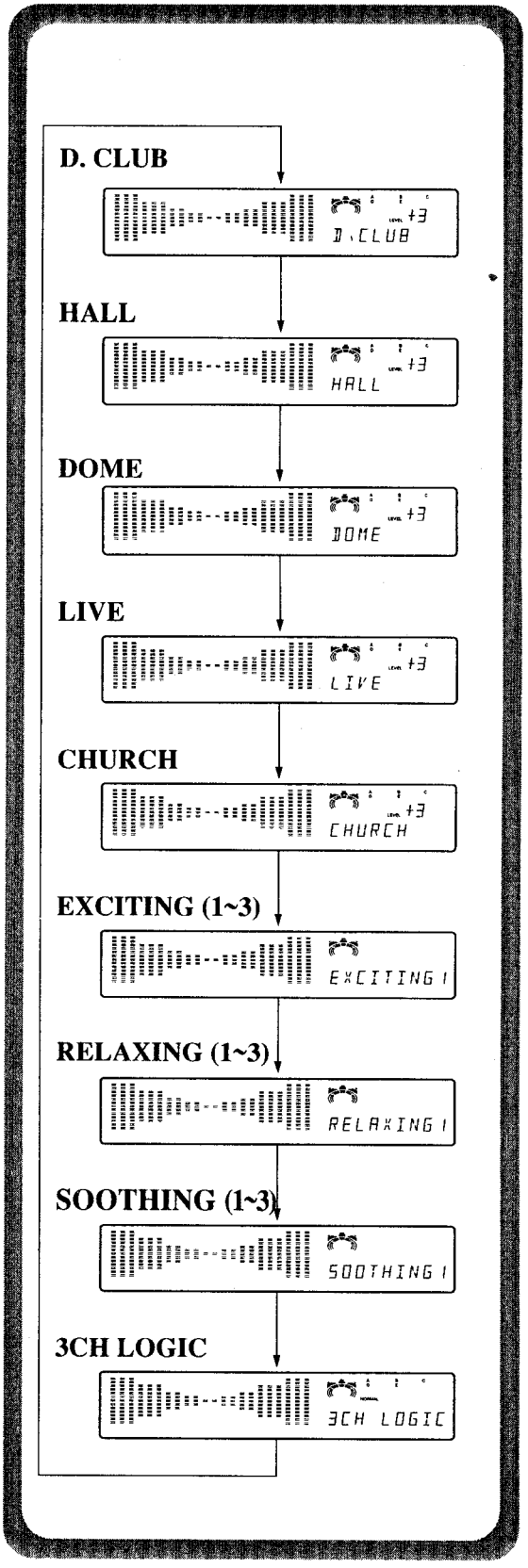
1) You can use the 4 channel (front and rear speakers) effect by connecting optional rear speakers.
2) By connecting the optional center speaker, you can use it separate mode in the Dolby Pro Logic mode.
3) You can record any source with either the DAP or DSEP effect. But remember, you can not use both effects at the same time.

To cancel the 4CH/SEP. C mode, press the 4CH/SEP. C button again.

The LED goes off.

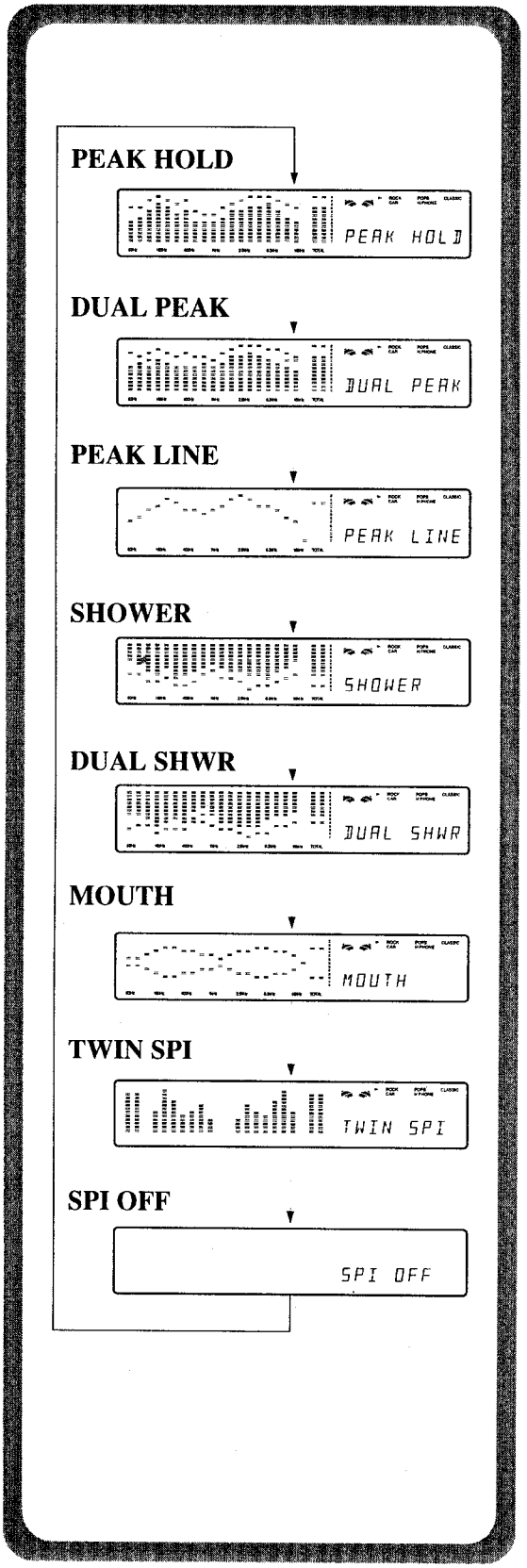
DEMO

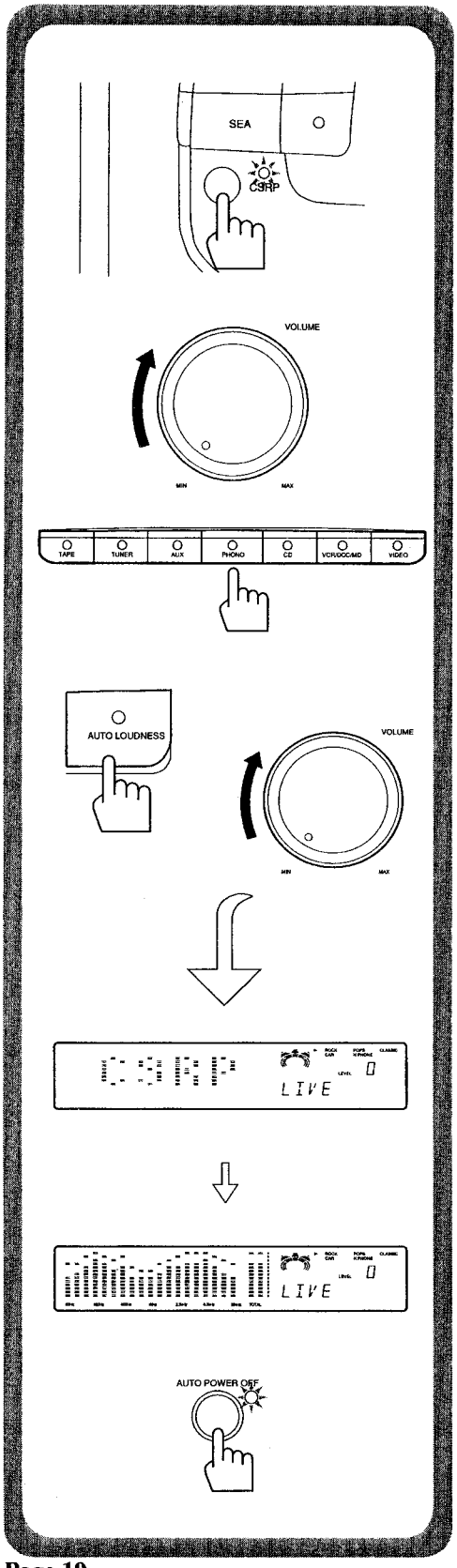
Use the DEMO function to try the various sound modes for a song. During play, press DEMO button.
9 sound patterns cycle automatically.
To cancel the DEMO function, press the DEMO button again.



DISPLAY

The display shows the status of each frequency band of the sound. During play, press the DISPLAY button. Each time you press the button, the display shows the various sound patterns.
DUAL PEAK and DUAL SHOWER show also the SEA pattern simultaneously.





CSRP (COMPU LINK SOURCE RELATED PRESET SYSTEM) Function

CSRP is the electronic feature that presets volume, display mode and other control functions. The CA-MXG9BK has four CSRP functions; Volume CSRP, Time Link CSRP, AUTO LOUDNESS, AUTO POWER OFF, which allow you to set the desired listening environments.

Volume CSRP

Just by pressing the CSRP button (the CSRP indicator lights up). When you turn off the Unit, the VOLUME control is automatically turned down. When you turn on the Unit,the VOLUME control is automatically set to around the most recently used level.

Time Link CSRP

While the CSRP indicator is lit, Time Link CSRP allows you to store the following items into the CSRP memory automatically. See the following example.

- Volume
- DSP mode
- SEA preset patterns
- Display mode

These four items are stored for each source and for each time range.

** There are four time ranges; 6:00~, 12:00~, 18:00~ and 24:00~.*

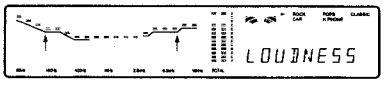
To call up the Time Link CSRP

1. Press the CSRP button.
   The LED next to it lights up.
2. Select the sources.

AUTO LOUDNESS

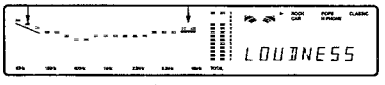
When the AUTO LOUDNESS button is pressed (the indicator on it lights up), the SEA characteristic will change in accordance with the volume level. This means that at low volume, insufficient bass and treble are automatically compensated for, so you can have a full sound at any volume level.

Low volume level



The bass and treble are automatically increased.

High volume level



The setting approaches the normal preset pattern.

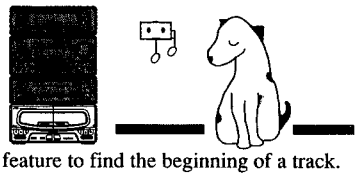
AUTO POWER OFF

You can fall asleep to music while listening to CD or tape. The CA-MXG9BK will turn off by itself rather than play all night.
Press the AUTO POWER OFF button while listening to CD or tape.
When CD or tape play is over, the Unit will automatically turn off.

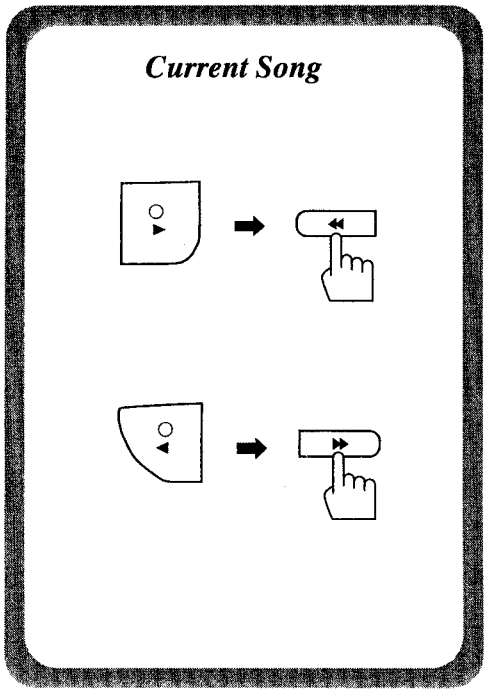
Notes

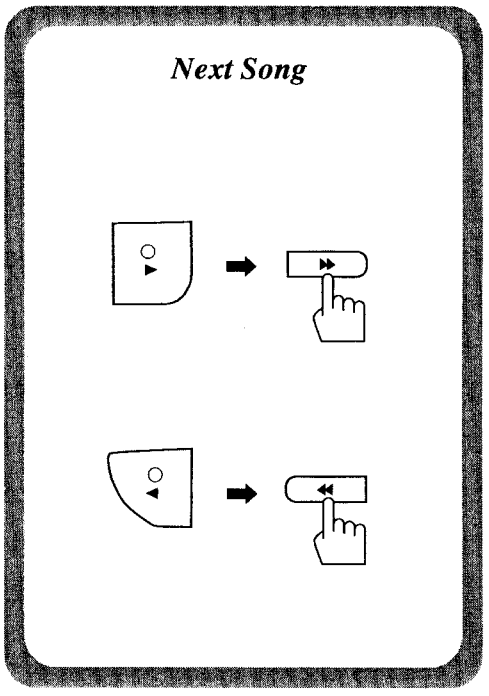
- *The repeat function of CD player does not work with AUTO POWER OFF.*
- *The Tuner Entry (see page 28) does not work with AUTO POWER OFF.*
- *Ending of tape play depends on the REVERSE MODE setting.*
  Tape play ends either after one side is played or after both sides are played.

Playing Tapes



If there are 4-second or longer blanks between tracks on recorded tapes, you can use the Music Scan feature to find the beginning of a track. (For simple playback procedures, see page 7 of the Easy Guide section.)





Music Scan (Finding Songs)

To find the beginning of a music track use the Music Scan feature. Music Scan searches for blank portions that usually separates tracks, then plays the next track.

Finding the Beginning of the current song

Press the ◄◄ or ►► button during play.

Make sure you press the ◄◄ or ►► button in the opposite direction to tape play. Searching stops automatically at the beginning of the current song, and the current song starts automatically.

Finding the Beginning of the next song

Press the ◄◄ or ►► button during play.

Make sure you press the ◄◄ or ►► button in the same direction to tape play. Searching stops automatically at the beginning of the next song, and the next song starts automatically.

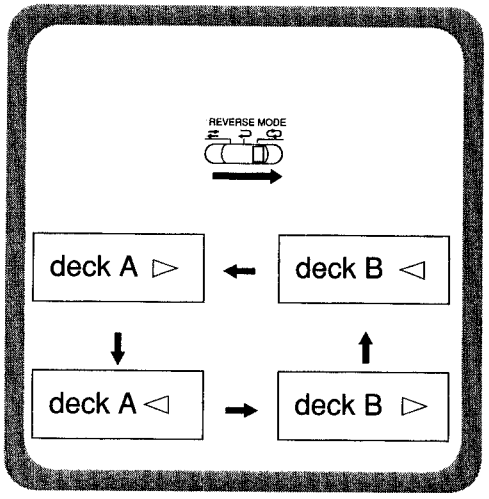
Notes

The Music Scan feature works by detecting a 4 second blank at the beginning of each selection, so it won't work well if your tape has:

- *No blank at the beginning of a track.*
- *Noise (often caused by much used or poor quality dubbing) which fills the blank with noise.*
- *Long very soft passages or pauses in a selection. Music Scan will detect these instead of the 4 second blanks. If this happens, just go ahead with Music Scan again until you reach the selection you want.*

Music Scan only works on one tape at a time.

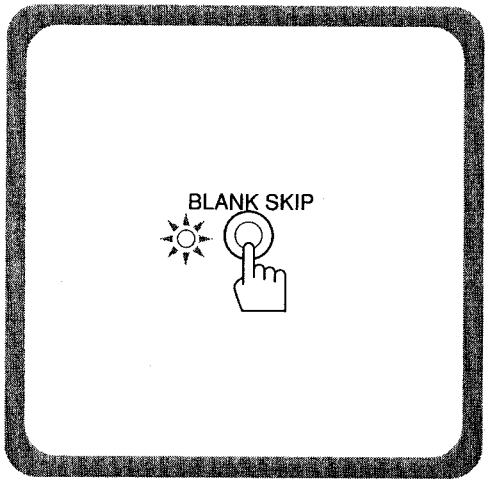
- *If you perform the Music Scan on deck A during recording on deck B, deck B enters recording pause mode.*
- *If you start recording on deck B while Music Scan is performed on deck A, Music Scan is stopped.*



Using Continuous Play

When you play tapes, you can select the side to be played by using the REVERSE MODE selector.

⇄: only one side is played
⊃: both sides are played
⇆: both sides are played repeatedly.
When tapes are in both decks, continuous play follows the sequence at the left regardless where playback starts.
* The sequence is repeated endlessly.

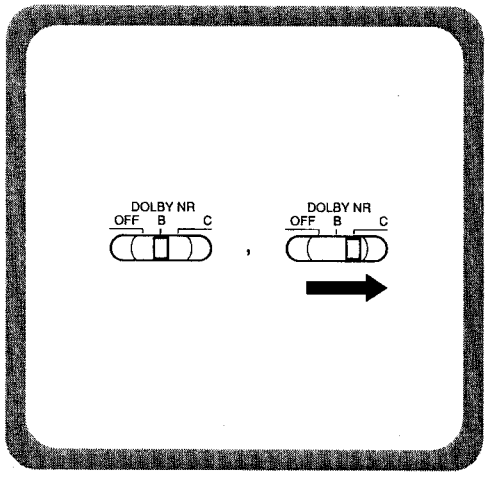


Skipping Blank Portions during Playback

If there is a blank portion of 10 seconds or longer on a tape, the Unit will automatically fast forward, and skip the blank portion, then play back the next track.

Press the BLANK SKIP button before or during play.
The LED next to it lights up.

To cancel the blank skip playback
Press the BLANK SKIP button again.
The LED next to it goes off.

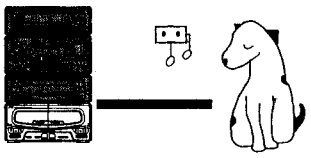


*Using the DOLBY NR * selector*

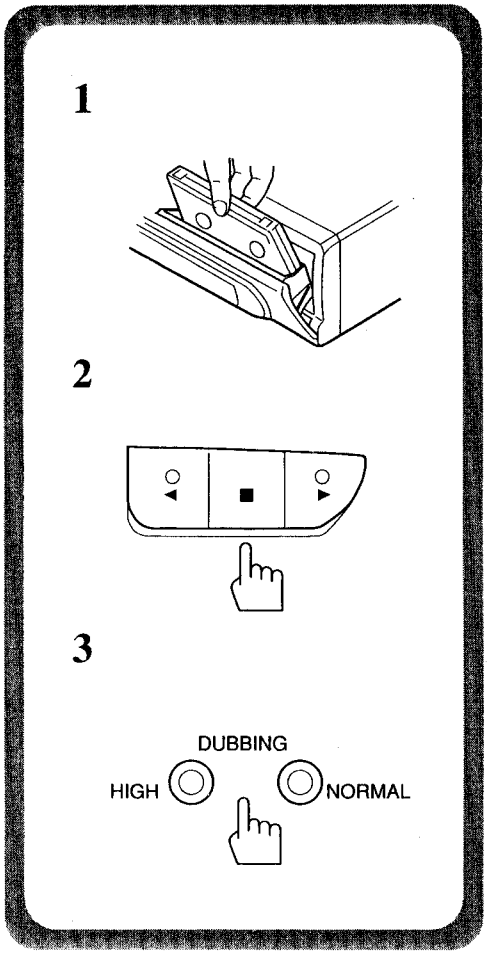
To play a tape recorded with the Dolby Noise Reduction effect, set the DOLBY NR selector to the same NR system (DOLBY B NR or DOLBY C NR) as was used when recording.
If a tape is recorded with the Dolby NR system, playing it back with the same Dolby NR system will reduce tape hiss and improve the clarity of the sound.
Note:
Dolby NR is inactive in dubbing mode regardless of the setting of the NR switch. The dubbed tape automatically contains the same processing as the source tape.

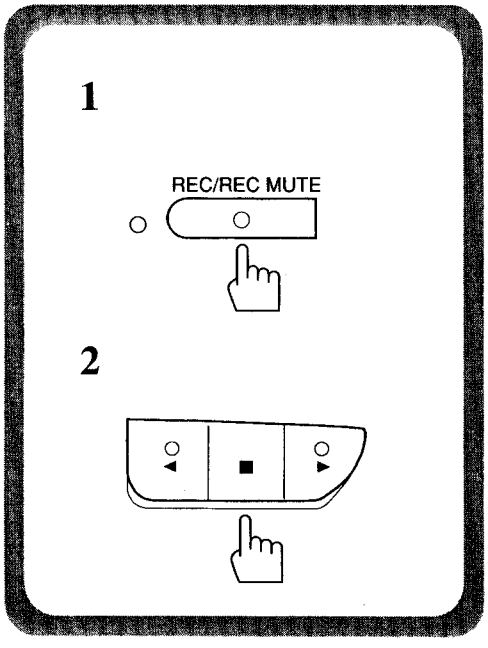
** Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol, and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

Recording onto Tape



Recording from one tape to another is called dubbing.
You can dub at regular speed for highest quality, or at high speed with a slight loss in sound quality.
With high speed it takes only about one-half the time to copy a tape. For regular recording procedure, see page 8 of the Easy Guide section.





High Speed Dubbing or Normal Speed Dubbing

Although the quality of the dubbed tape is a little less, high speed dubbing is a very convenient way to record from one tape to another.
You can only use deck B to make recordings. Deck A is for playback only.

1. **Put the tape you want to copy *from* into deck A, and the tape to be copied *onto* in deck B.**

2. **On both decks, press either the ◄ or ► button while pressing the ■ button, in order to select the playing and recording side.**

3. **Press either the DUBBING HIGH or the DUBBING NORMAL button.**

Note
During dubbing, you can also listen to another source such as the radio or the CD player, just as if you weren't dubbing.
- *The sound cannot be dubbed with SEA sound patterns and DSP effect.*
- *During dubbing, when you press the AUTO POWER OFF button, the Unit automatically turns off after dubbing is over.*

To dubb on both sides
Set the REVERSE MODE selector to either ⊃ or ⇄. Dubbing starts from the ▷ front side of both deck A and B.

Recording selections from several different tapes
When you want to take selections from several different tapes and combine them on one tape during dubbing, follow these steps:
1. Press the ■ button on deck A.
   This causes deck A to stop, so you can change tapes, and deck B makes a 4 second blank and pauses.

2. Change the tape in deck A.

3. Press either the DUBBING HIGH or NORMAL button (the same one you are using now) to start deck A playing and deck B recording again.

Things to know before start recording
- It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.
- Cassettes have a special feature so you won't accidentally record over a tape you want to save. Two small tabs on the back, one for side A and one for side B, can be removed to prevent erasure or re-recording. To record on a cassette with the tabs removed, you must cover the holes with tape first. However, when a Type II tape is used, only cover part of the hole as shown below, since the other part of the hole is used to detect the tape type.

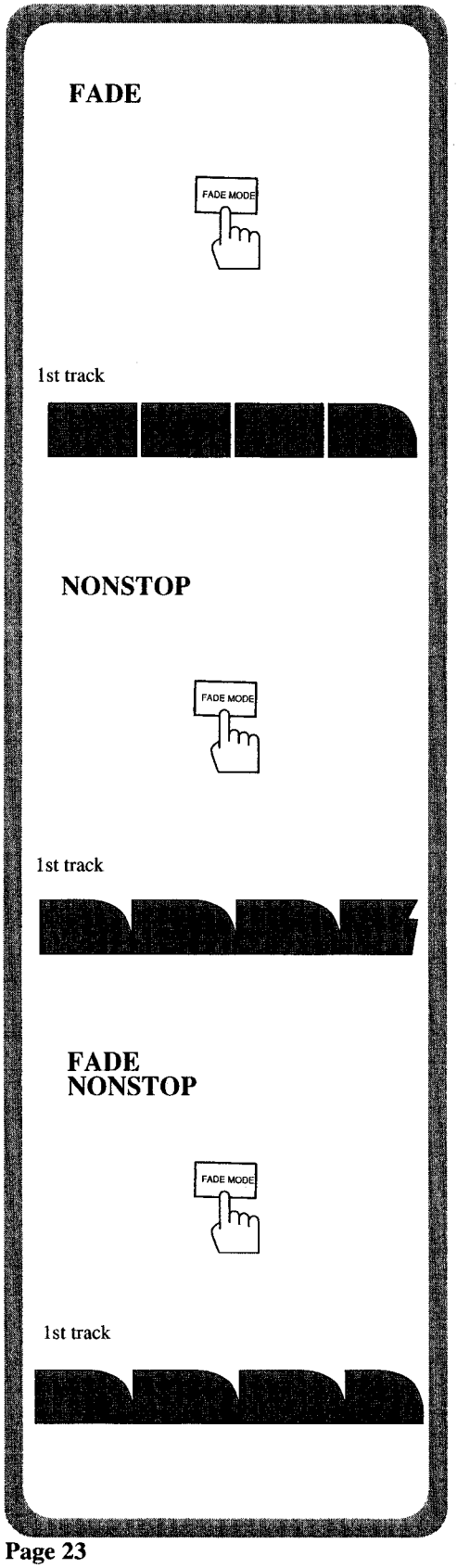
- Type I, II and type IV tapes can be used for recording.
- If recordings you make have excessive noise or static, the Unit may be too close to a TV which was on during the recording. Either turn off the TV or increase the distance between the TV and the CA-MXG9BK.

Making a 4-second Blank on a Recorded Tape

1. **Press the REC/REC MUTE ○ button during play.**
   The LED next to it blinks for 4 seconds and deck B enters recording pause mode.

To make a blank portion longer than 4 seconds, keep the button pressed for the length of time you want the blank to be.
When the button is released, deck B enters recording pause mode.

2. **Press the ◄ or ► button to restart recording.**



Recording from CD - Fuzzy CD Recording

Since the CA-MXG9BK provides 3 types of Fade modes and 4 types of CD Editing modes, you can make a variety of CD recordings by combining these 7 modes.

Using the Fade Mode

There are 3 types of Fade mode; FADE, NONSTOP, FADE NONSTOP (a combination of NONSTOP and FADE).
Each time you press the FADE MODE button, the Fade mode changes in the following sequence.

FADE→NONSTOP→FADE,NONSTOP→OFF

(You will see these changes on the CD display)

FADE : At the end of the tape, the CA-MXG9BK automatically goes back to the beginning of the last selection and re-records it, this time gently fading out at the end.

- If you have set the REVERSE MODE to ⇉ or ⇄ , side B starts recording at the beginning of the last track on side A. So you get the whole selection, even though part of it was cut off when the tape ran out on side A.

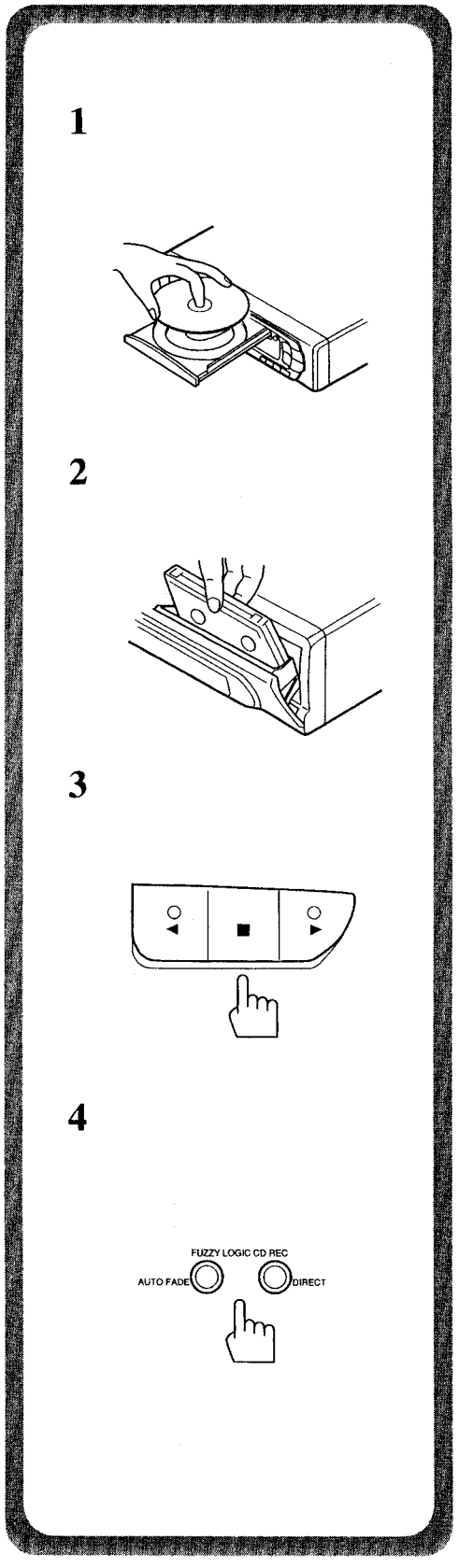
NONSTOP: Every track ends by fading out, and the next track starts as soon as fading-out is over. Thus, you can make a tape with no blank portions between selections. At the end of the tape, however, this mode does not make the end of the track fade out, if the selection is cut off when the tape runs out.

FADE
NONSTOP: Using this mode you can record the entire tape without any blanks. Every track ends by fading out, and at the end of the tape, the last selection fades out instead of cutting off abruptly when the tape runs out, just like FADE.

- If you have set the REVERSE MODE to ⇉ or ⇄, side B starts recording at the beginning of the last track on side A.

Note
NONSTOP and FADE NONSTOP modes cannot be used with the MULTI EDIT mode (see page 25).

Recording with special effects
When you start recording with Fuzzy CD Recording or Auto Edit, the special effects cannot be changed without stopping recording, and often having to start over. If you need different sound effects for each selection, use the standard recording features described in the Easy Guide section.



What is Fuzzy CD Recording?

If the recording level is too high, distortion will result; On the other hand, if the recording level is too low, the sound volume will be low. So, it is very important to check the peak level of the source tracks before recording. Furthermore, it is necessary to check the tracks' overall level. With the Fuzzy CD Recording feature, if the tracks' overall level is high, the recording level will be set lower, and, if the tracks' overall level is low, the recording level will be set higher. In this way, the optimum recording level is set according to the sound inclination of the tracks as well as the peak level. The conventional peak search function does not take into account the tracks' overall balance when setting the recording level; therefore, the recording level tended to be low. Fuzzy CD Recording gives a balanced recording level which matches different kinds of tracks.

Fuzzy CD Recording

1. **Load a CD in the tray.**
2. **Put a tape in deck B.**
3. **Select the side to record on, by pressing either the ◄ or ► button while pressing the ■ button on deck B.**
4. **Press either FUZZY LOGIC CD REC AUTO FADE or DIRECT button.**
   The tape starts recording 10 seconds before the CD starts, making a 10 second blank at the beginning of the tape to insure the entire selection is recorded.

- If the last recorded track cannot fit on side A, it will be re-recorded with fade -out.
- When REVERSE MODE is set to either ⮌ or ⮂, side B recording will start after a blank portion of 10 seconds is made. The recording will continue with the last track recorded with a fade-out on side A.
- The last track on side B will end by fading-out.
- If the inserted tape has not been rewound, it will be rewound automatically before recording begins.

To stop recording

Press the ■ button on deck B or the STOP/CLEAR ■ button on the CD player.

Note

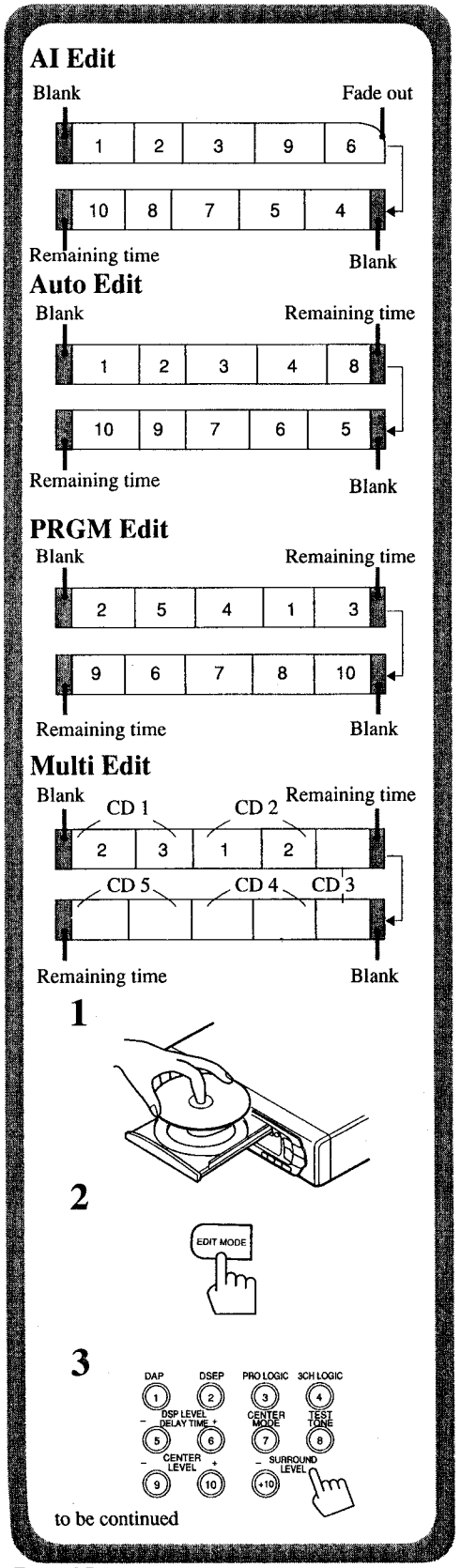
The tracks can be recorded with a specified sound effect (SEA pattern and DSP modes). Sound effects cannot be changed during recording.

AUTO FADE starts the recording with AI Edit (page 25) and Fade mode (page 23).

- When FUZZY LOGIC CD REC (either AUTO FADE or DIRECT) is pressed, the optimum recording level will be determined by the fuzzy search, then the recording will start from the first CD track. (Since the fuzzy search will search the entire CD, it will take a little time.)
- During the fuzzy search, the track number, number of tracks, playing time, etc., will change accordingly.

Using CD Edit Mode

The CA-MXG9BK has four CD Edit modes; AI Edit, Auto Edit, Program Edit and Multi-Edit. To take advantage of these Edit modes, read thefollowing instructions carefully.



to be continued

What is AI Edit?

This is an editing function which complements the Auto Edit mode. You can use it to maximize the use of the remaining tape length. When the tape comes to its end, the FADE mode will function automatically. Up to 16 tracks can be edited for one side.

What is Auto Edit?

To prevent the beginning of the track from not being recorded, the last track will be replaced automatically in accordance with the remaining tape length. The editing will start with the earlier tracks and the tracks will be selected so they can fit on the tape. No track is selected twice. However, depending on the remaining time, the same track may be selected twice to fill in the recording time at the end of the tape. After up to 16 tracks are edited, the editing procedure will stop.

What is PRGM(program) Edit?

Using this mode you can select which CD tracks go on which side of the tape, and in what order.

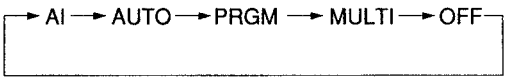
What is Multi Edit?

Using this mode you can select tracks from several different CDs. The NONSTOP and FADE NONSTOP modes cannot be used with Multi Edit mode.

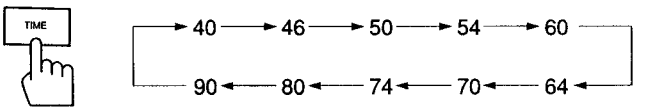
Operating procedures

1. **Load a CD in the tray.**

2. **Press the EDIT MODE button to select the EDIT mode you want to use.**
   Each time you press the button the indicator is displayed as follows in the CD display window.



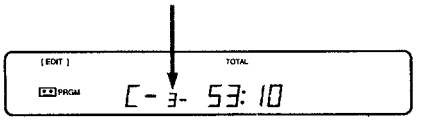
3. **Press the TIME button to set the time duration.**
   Each time you press the button, the pre-programmed tape length is shown on the display as follows.



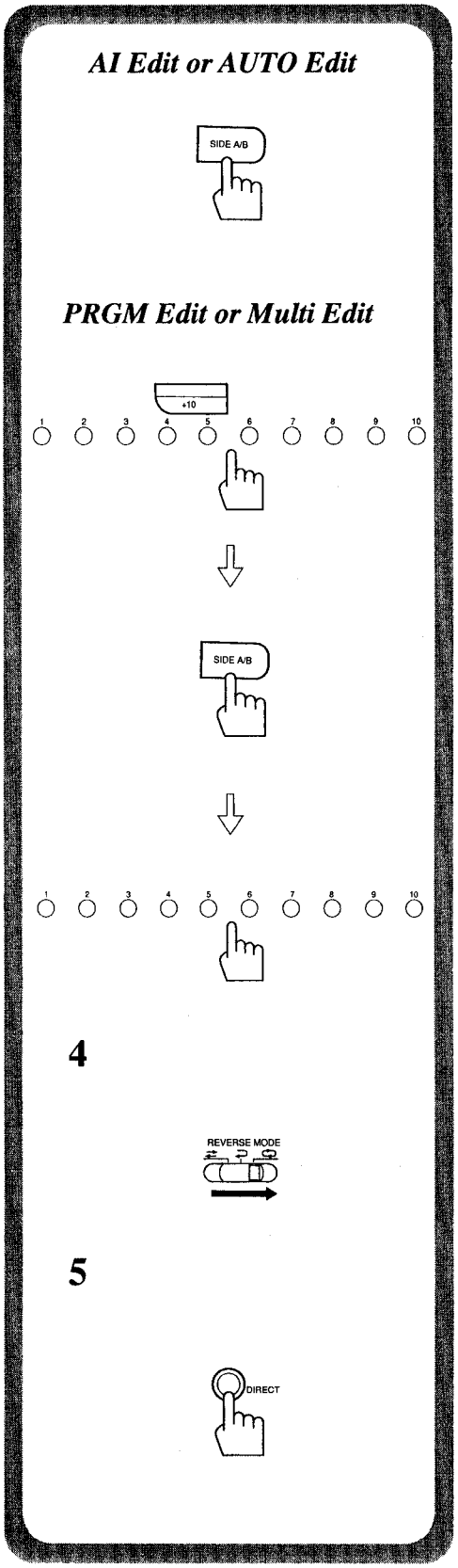
If you want to use the Remote, you can set the tape duration by using the +10 button and 10 keys. (Make sure that the TUNER/CD/DSP is set to the CD position.)

ex. C-30: +10, +10, 10.
C-46: +10, +10, +10, +10, 6.
C-74: +10, +10, +10, +10.....Press the +10 button seven times, then press 4 button.

This number shows the how many times you have pressed the +10 button.



to be continued



When you have selected the AI Edit or Auto Edit

Press the SIDE A/B button

The tracks which can fit on side A and B will be automatically selected in accordance with the specified tape length. By repeatedly pressing the SIDE A/B button you can check which tracks have been programmed for which side of the tape.

When you have selected the PRGM Edit or Multi Edit

Select the track numbers for side A with 10 keys.

When you have selected the Multi Edit, you can select tracks from different discs. After you have selected tracks from one disc, replace it with the next disc, then select tracks you want.

Press the SIDE A/B button.

Select the track number for side B.

When you have selected the MULTI EDIT you can change discs, and select up to 10 tracks from one disc.

4. **Put a tape in deck B and set the REVERSE MODE selector to the ⇄ position.**

5. **Press the FUZZY LOGIC CD REC DIRECT button.**

After a blank of 10 seconds is made at the beginning of the tape, the CA-MXG9BK stores your setting in memory, then the recording will start. If the inserted tape has not been rewound, it will be rewound automatically before the recording begins.

(Only for the Multi Edit mode)

When the first disc play ends, deck B enters recording pause mode. Change the disc and press the FUZZY LOGIC CD REC DIRECT button, and repeat this procedure until all the programmed discs are played.

To stop the recording

Press the STOP/CLEAR ■ button.

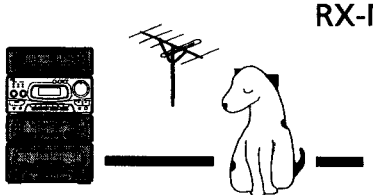
Notes on the PRGM Edit and Multi Edit

To delete the last selected track

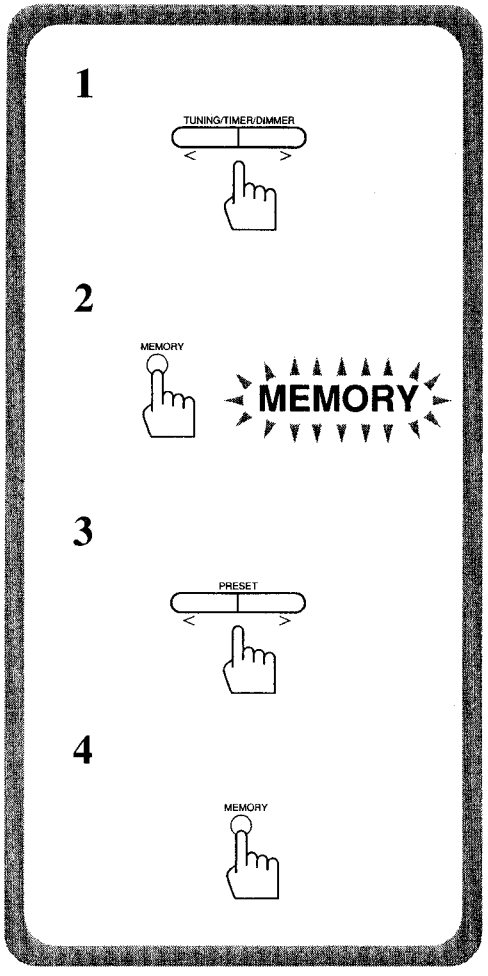
Press the CANCEL button on the CD section in stop mode. Each time you press the button, the last selection will be deleted.

When using Multi Edit, you can only delete the last selected track of the disc loaded on the tray. To delete the last selected track of another disc, change the disc and press the CANCEL button.

Receiving Radio Broadcasts



The controls for the radio are located in the Tuner/Amplifier section. With these controls you can browse through all the stations or use the preset function to go immediately to a particular station. For tuning stations manually, see page 8 of the Easy Guide section.



Using the Bandwidth Memory

Storing Preset Stations

Once a station is assigned to a channel number, the station can be quickly tuned either from the Remote using the 10 keys or from the CA-MXG9BK itself using the PRESET < or > button to call up the channel number.

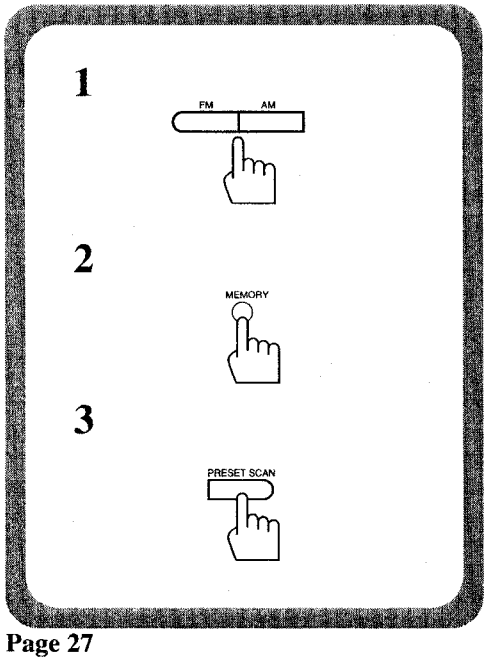
To preset radio stations

1. **Tune in the station you want to set (see page 8 in the Easy Guide section).**
2. **Press the MEMORY button.**
   On the Tuner/Amplifier display, MEMORY will blink for 5 seconds. During these 5 seconds while MEMORY is blinking you can assign a channel number to the station and enter it into the memory.
3. **Select a channel number by pressing the PRESET < or > button until you find the channel number you want.**
   If you select a number you have already assigned, the previous selection will be erased and replaced by the new station.
4. **Press the MEMORY button again and the station will be assigned to the channel number showing on the display.**
   Up to 10 stations each for the FM and AM bands can be preset.

To cancel presetting

Press the CANCEL button.
On the display, CANCEL will blink for 5 seconds. During these 5 seconds for which CANCEL is blinking, you can select the station you want to erase. Press the CANCEL button again.

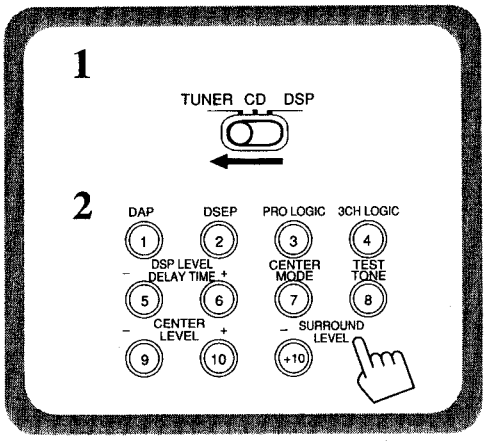
CAUTION: Preset stations may be erased when power is cut off to the Unit, as when it is unplugged from the AC outlet or a power failure occurs. If the preset stations are lost, simply set the stations again using the above procedure.



Using Auto Preset Function

The CA-MXG9BK will automatically preset AM or FM stations.

1. **Press the FM or AM button.**
2. **Press the MEMORY button.**
   On the display MEMORY will blink for 5 seconds. During these 5 seconds for which MEMORY is blinking you can use the Auto Preset mode.
3. **Press the PRESET SCAN button.**
   Regardless of whether FM or AM is selected, the automatic search will start with the FM stations. After the FM preset operation is completed, the AM preset operation will begin. Up to 10 stations each for the FM and AM bands can be preset.
   When a station is found, it will be received for about 5 seconds. If you do not want to preset the station, press the PRESET SCAN button again while receiving the station and the station will be skipped.

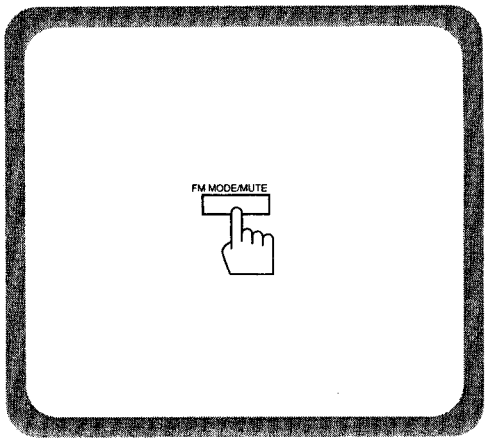


Tuning in a Preset Station

The Remote is very useful for this because you can select channels by number using the 10 keys.

1. **Set the TUNER/CD/DSP selector to the TUNER position.**

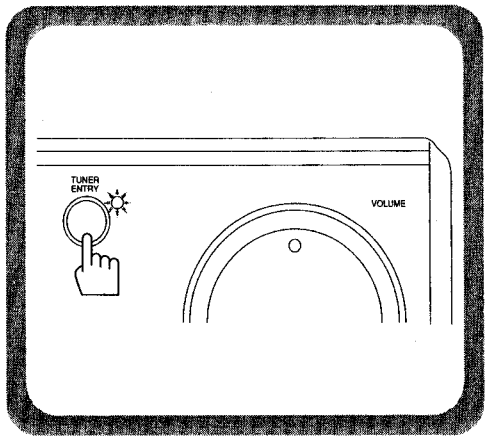
2. **Press the 10 keys to select the channel you want.**
   You can also tune in the stations by using the PRESET< or> button on the main Unit. Each time you press the PRESET < or > button, the channel increases or decreases by one. If you hold the button down, the tuner will cycle through the stations one after another.



Selecting the FM Tuning Mode

When an FM stereo broadcast is hard to receive or noisy:
Press the FM MODE/MUTE button on the main Unit so that reception improves, although you lose the stereo effect. In this state, you will hear noise while tuning into stations. MONO lights up on the display.

To restore stereo effect
Press the FM MODE/MUTE button again so that AUTO appears on the display.
In this state, when a program is broadcast in stereo, you will hear stereo sound; when in monaural, you will hear monaural sounds. In this state, you won't hear noise while tuning into stations.



Using the Tuner Entry Function

When the CD or tape playback ends, the source will automatically switch to TUNER. Your listening enjoyment will thereby not be interrupted. So with Tuner Entry on, the Unit automatically shifts to the most recently tuned radio station when a tape or CD comes to an end.

Press the TUNER ENTRY button.

The LED next to it lights up when Tuner Entry is on and is off when Tuner Entry is off.

When the CD or tape playback ends, the source will switch to the most recently tuned radio station tuned.

Note

In five situations even if Tuner Entry is on, it will not take effect, and the source will not switch to TUNER after the CD or tape playback ends.

1) When you intentionally stop the CD or tape deck by pressing the STOP/CLEAR ■ button on the CD player or the ■ button on the tape deck.

2) When any timer activated CD or tape stops playing.

3) When you set the REVERSE MODE to the ⇄ position.

4) When you set REPEAT or REPEAT 1 playing.

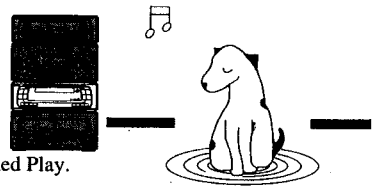
5) When you set AUTO POWER OFF.

Set the AM Tuner Interval Spacing

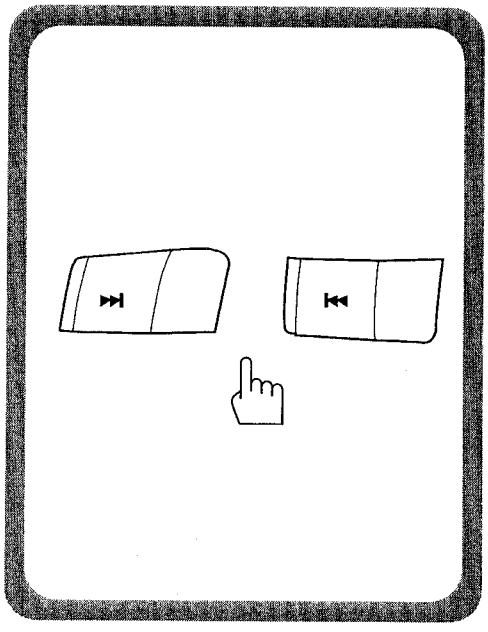
Some countries space AM stations 9 kHz apart, and some countries use 10 kHz spacing.

1. To select the 10 kHz interval, be sure the power is off, but the Unit is plugged into the wall socket. Hold down the PRESET > button and press the POWER ON/STANDBY button.
   Now the 10 kHz interval is selected.
2. To change back from 10 kHz to the factory setting of 9 kHz, be sure the power is off, but the Unit is plugged into the wall socket. Hold down the PRESET < button and press the POWER ON/STANDBY button, and the CA-MXG9BK in now set for 9 kHz spacing.

Playing CDs



You can use various function such as Auto Search, Random Play, Repeat Function, and Programmed Play.



Locating a Particular Track or a Particular Portion of theTrack

Finding a Track You Want

Each time you press briefly and release the ⏮ or ⏭ button, the track changes by one.

- Press and release the ⏭ button to go ahead one track at a time.
- Press and release the ⏮ button to go back one track at a time.
- With the Remote, holding the ⏮ or ⏭ button will change the tracks continuously.

Note

** Although fast forward and fast reverse are not usable when the CD is off, the track change function is available, so you can select the track you want to start playing when you start the CD. The track number is shown on the display.*

Finding a Particular Point You Want

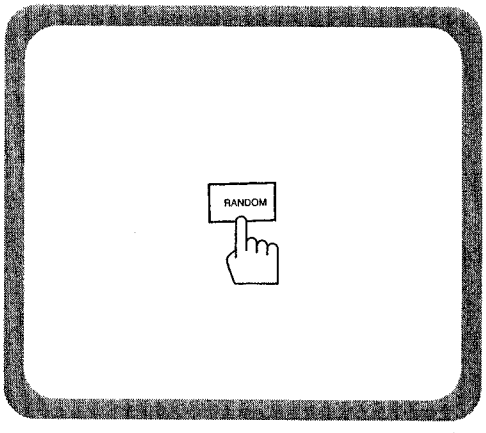
Holding down the ⏮ or ⏭ button on the main Unit will fast forward or fast reverse the CD so you can quickly find the particular portion of a track you want to listen to.

Locating a Track directly with the Remote

1. Set the TUNER/CD/DSP selector to the CD position.

2. Enter the number of the track you want using the 10 keys.

• Example: for track 5, press 5. For track 15, press +10 then 5. For track 20, press +10, then 10.



Using Random Play

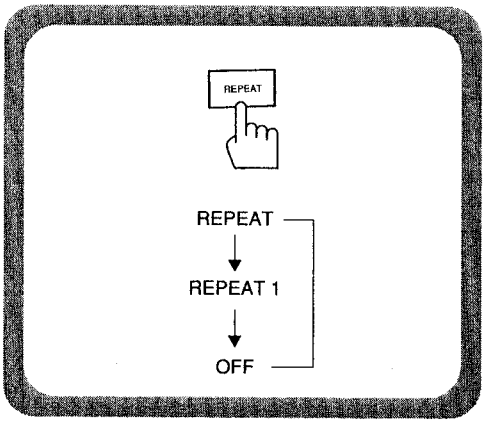
Since the microcomputer will determine the order of the tracks to be played, you will be surprised by the next track played.

Before starting a CD, press the RANDOM button. RANDOM lights up and the ► indicator blinks on the display.

- When all of the tracks have been played, random play will stop.

To stop and cancel the Random Play

Press the STOP/CLEAR ■ button.



Using the Repeat Function

You can have either the program or the individual selection currently playing repeat as many times as you like.

Each time you press the REPEAT button, it cycles from OFF, which turns the REPEAT indication out on the display, to REPEAT which will repeat all tracks in order or according to the program you have set, and REPEAT 1 which will repeat the currently playing track.

To cancel Repeat

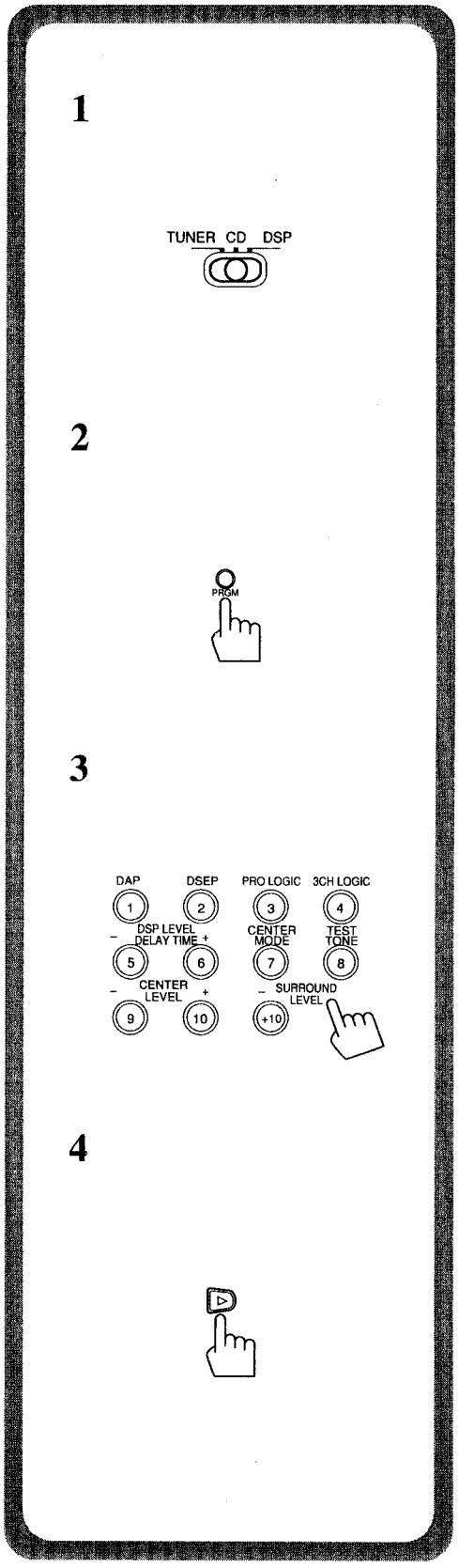
Just press the REPEAT button until the REPEAT indication on the display goes off.

Note

Repeat Play can be used with Program Play or Random Play.

• With Program Play, the program you made is repeated.

• With Random Play, all the tracks on the CD are repeated in a different order each time.



Using Programmed Play

In addition to the high quality sound which makes the CD such a good way to listen to music, you can change the order in which the tracks play. You can arrange the tracks to play in any order you like with the Program function. The Remote is very useful for this because you can select tracks by number with the 10 keys.

To program the CD track order from the Remote

1. **Set the TUNER /CD /DSP selector to the CD position.**
2. **Press the PRGM button. PROGRAM lights on the CD display window**
.
3. **Press the 10 keys to select the track numbers you want.**
   Your program can include up to 32 tracks, and you can repeat tracks if you wish.
4. **Press the ▷ button on the CD CONTROL section of the Remote to start the program.**
   The first track you programmed will start to play.

To stop the CD during Programmed Play

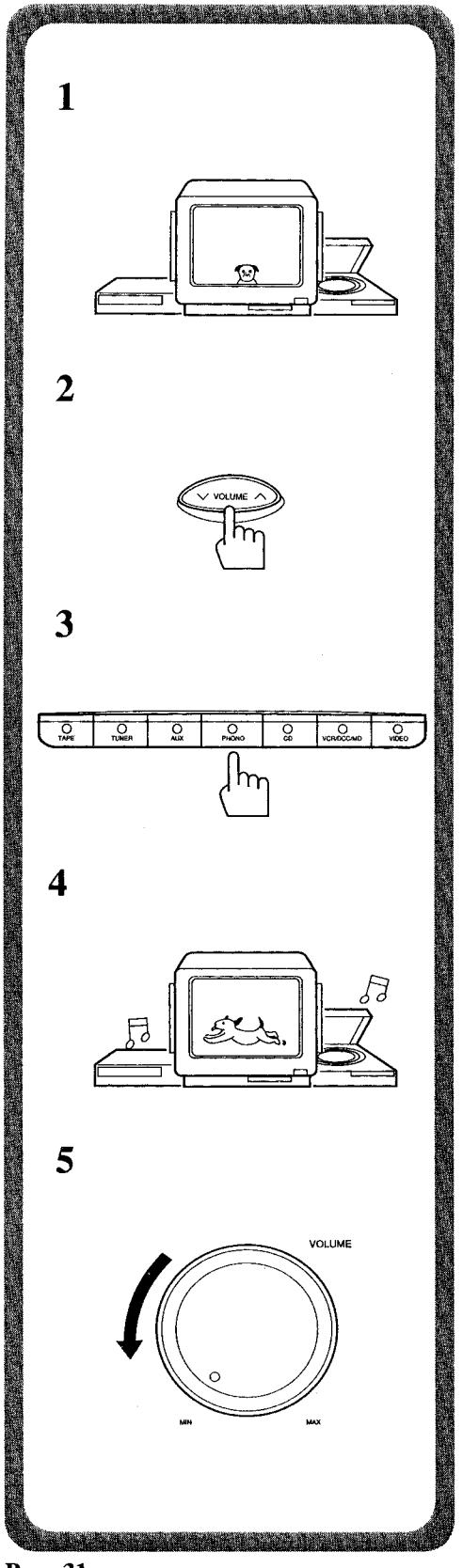
Press the □ button. To cancel the program, press the PRGM or the PROGRAM button on the main Unit.

A Few Hints to Make Programming Easier

- If you want to change the number of a track you just entered, press CANCEL on the main Unit, and enter another number.
- If you want to change the entire program, press the STOP/ CLEAR ■ button on the main Unit twice, and then you can start over.
- To view the order of the tracks in your program when it's playing, press the □ button, then press the ⏮ or ⏭ on the CD CONTROL section of the Remote to display the order of the tracks. Each time you press the ⏭ button the next selection in your program is displayed. (Press the ⏮ button for the previous selections.)
- To add a track to your program during play, press the 10 keys on the Remote. Any tracks you add will appear at the end of the current program.

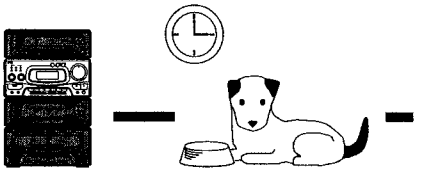
Listening to a VCR , Record Player or other Equipment through Your CA-MXG9BK

By playing a VCR, Record Player or other connected equipment through the CA-MXG9BK, you can often dramatically improve the sound quality, as well as gain control over how the music or program sounds. Once the connected equipment is playing through the CA-MXG9BK, you can apply the sound effects, make recordings, or listen with the headphones. Here are the steps to take:

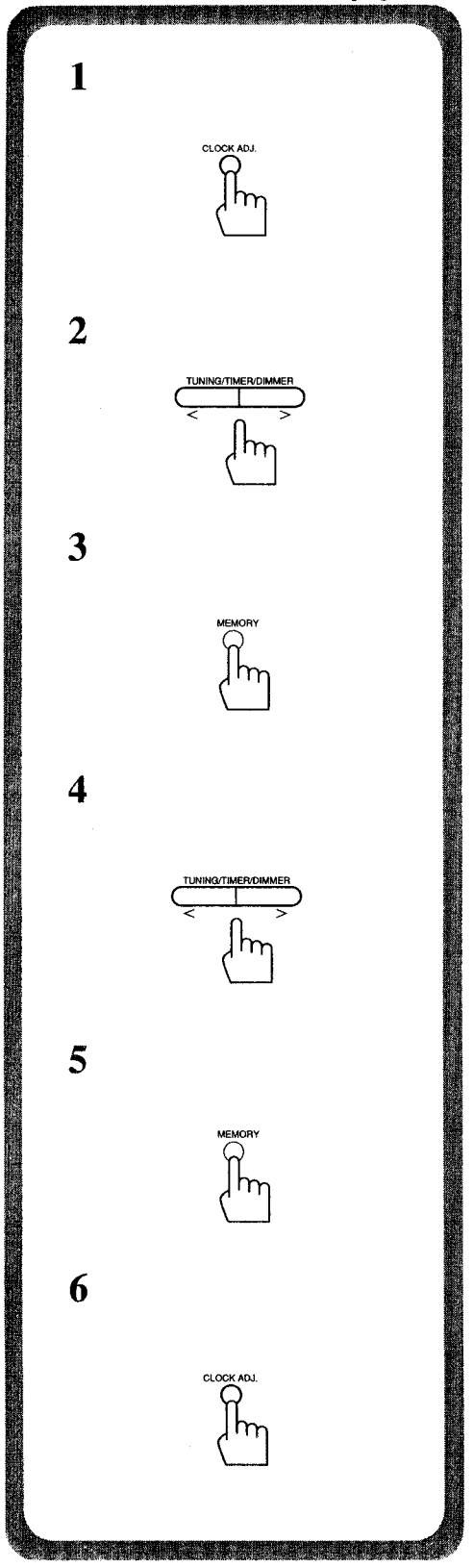


1. **Make a connection between theVCR, Record Player or other equipment as shown on page 4.**
   - Since there are many different types of VCRs and Record Players, etc., we can't tell you here just how to make the connections on the other equipment. However, the diagrams on page 4 will cover most cases, and you can also look in the instruction manual for the other equipment you have.
2. **Set the Unit's volume to its lowest setting. Use < VOLUME > on the Remote, or turn the VOLUME control all the way counterclockwise.**
3. **Select the connected equipment with the source selecting button.**
4. **Switch on the connected equipment and start it playing.**
5. **Adjust the VOLUME to a proper listening level.**

Using the Timers



The timers let you control recording and playing functions automatically.
Recording Timer—Unattended recording of radio broadcasts. You can set the starting time and recording duration.
Wake up Timer/Sleep Timer—Wake up to music from any source. Fall asleep and have your CA-MXG9BK turn off automatically after a certain length of time.
ONCE Timer/DAILY Timer—You can program the Unit to come on playing a source at a particular time, and then shut off at a special time.



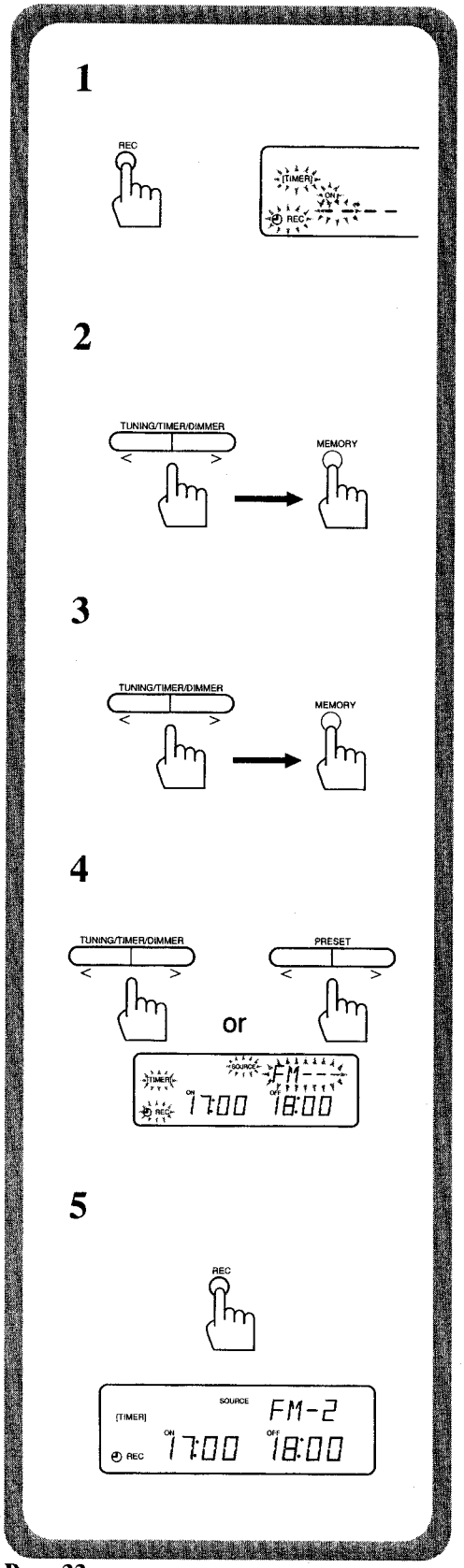
Setting the Clock

The timers depend on the clock: If the clock is right, the timers will work like you expect, but if the time is incorrect on the clock then the timers will also be incorrect.

Special Notice: The clock must be set, or the timers cannot be set!
So, let's set the clock first.

1. **Press the CLOCK ADJ. button.**
2. **Set the hour by pressing the TUNING/TIMER/DIMMER< or > button.**
   Each time you press it, the hour advances by one. Hold the button down, and the clock will advance one hour at a time as long as the TUNING/TIMER/DIMMER< or > button is held down.
3. **Press the MEMORY button, when the correct hour is showing on the display.**
   The hour is set.
4. **Set the minutes by pressing the TUNING/TIMER/DIMMER< or > button.**
   Each time you press it the minutes advance by one. Hold the button down, and the minutes advance in 10 minute increments .
5. **Press the MEMORY button.**
   The minute is set.
6. **Press the CLOCK ADJ. button again and the clock is set and starts from zero second.**

If the clock has not been set or if there has been a power outrage, "0:00" will be displayed and "CLOCK" will blink. If there is a power failure, the clock looses its setting, the display shows "0:00," and it must be reset.
You can set the clock and the Timers whenever the CA-MXG9BK is turned off, but still connected to a live power source.



Setting the Recording Timer

With the recording timer you can make a tape of a radio broadcast automatically whether or not you are there to start the CA-MXG9BK. For the timer to work correctly, you need to make sure of two things in addition to setting the time for the radio and tape deck to come on:

- A long enough tape must be in deck B.
- The clock must be set to the correct time.

1. **Press the REC button.**
   As long as the indicator is flashing, you can continue with the setting process. If you wait too long, and it stops before you are done, just press the REC button twice and start over.

2. **Set the time you want the radio to come on and the tape in deck B to start recording.**
   Use the TUNING/TIMER/DIMMER < or > button and the MEMORY button just like setting the clock. (See page 32)

3. **Set the time you want the radio and deck B to shut off.**
   Use the TUNING/TIMER/DIMMER < or > button and MEMORY button just like setting the clock. (See page 32)

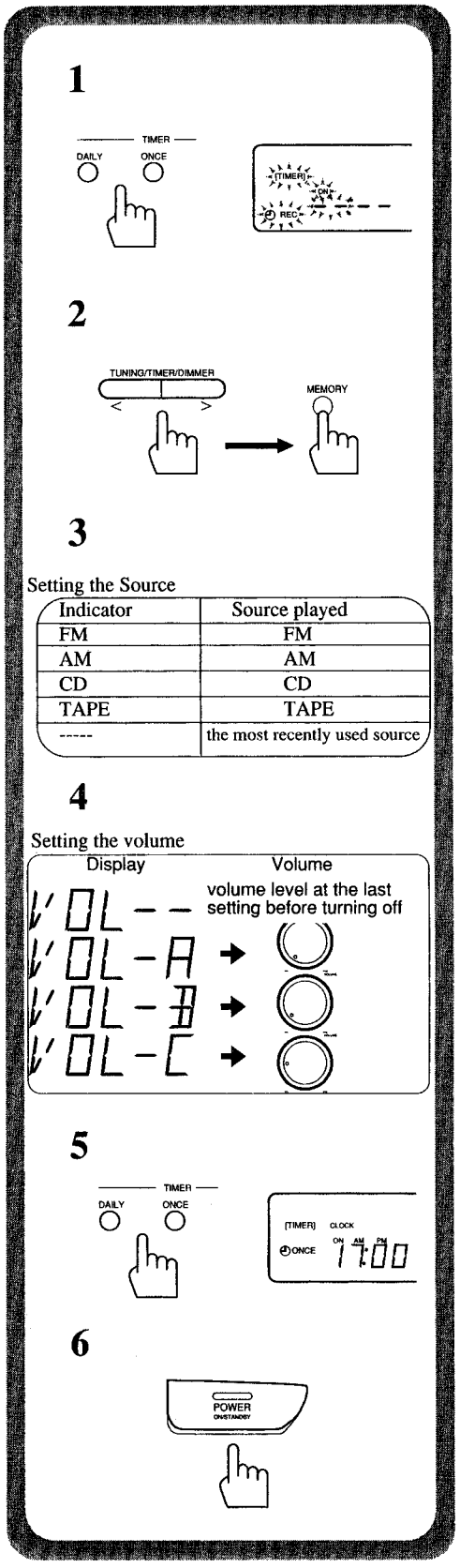
4. **Press the TUNING/TIMER/DIMMER < or > button to select an FM or AM station, and then press the PRESET < or > button to select the preset channels.**
   At the end of the set length of time the radio and deck B will shut off.

5. **Press the REC button again.**
   The Unit will memorize the setting.
   When the recording timer switches the CA-MXG9BK on, the VOLUME control will automatically be set to MIN.
   Notice that the REC indicator is lighted up on the display whenever the Recording Timer is set.

If you do not want the timer to operate but want to keep the setting
Press the REC button so that the REC indicator on the display goes off.

To reactivate the timer
Press the REC button again.

It is very easy, and can be very disappointing, to forget to put in a tape, or to accidentally leave a tape in deck B you don't want recorded over. Although this happens to almost everyone sometimes, we hope it won't happen to you!



Setting ONCE Timer/DAILY Timer

ONCE Timer works only once.
DAILY Timer executes the timer operation at the same time everyday.

1. **Press the ONCE or DAILY button which you want to set.**
   The timer (ONCE or DAILY) indicator (whichever you choose) blinks on the display.

2. **Press the TUNING/TIMER/DIMMER< or > button to set the start time and the stop time.**
   Use the TUNING/TIMER/DIMMER < or > button and MEMORY button just like setting the clock. (See page 32)

3. **Press the TUNING/TIMER/DIMMER < or > button to select the source, and then press the MEMORY button.**
   Each time you press it the display will cycle from one source to the next. When the source you want is showing, press the MEMORY button. The Unit will memorize the setting.

- When FM or AM is selected
  You need to select a preset station by using the PRESET < or > button.
- When CD is selected
  You can designate the first track to play from the first 10 tracks on the CD.

4. **Press the TUNING/TIMER/DIMMER < or > button to set the volume, then press the MEMORY button.**
   Each time you press it the display cycles from one volume setting to the next as the table on the left. When you press the MEMORY button, the Unit will memorize the setting.

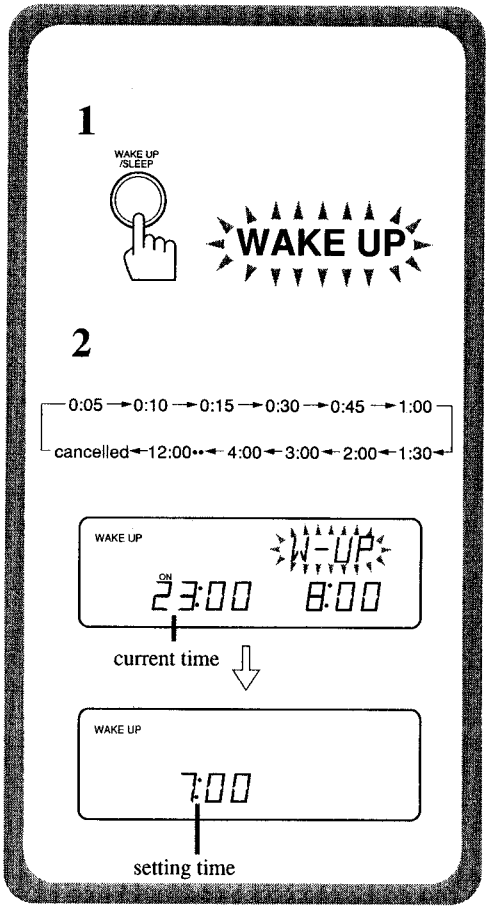
5. **Press the ONCE or DAILY button.**
   The timer indicator you have selected remains lit on the display and shows you the timer is set.

6. **Press the POWER button to turn the Unit off.**

If you do not want the timer to operate but want to keep the setting
Press the ONCE or DAILY button so that the ONCE or DAILY indicator disappears from the display.

To reactivate the timer
Press the ONCE or DAILY button again so that the ONCE or DAILY indicator lights up.

Note
When the timer-on time comes, the VOLUME control gradually turns up to the set position. For example, if your set position is VOL-B, the VOLUME control first turns up to and stays at the VOL-A position briefly, then turns up to the VOL-B position.



WAKE UP Timer

With this timer you can wake up to music from a CD, tape or your favorite radio program.

- The WAKE UP Timer can only be set when the Unit is turned off.

1. **Press the WAKE UP/SLEEP button with the CA-MXG9BK off.**
   The WAKE UP indicator on the display will start blinking.

2. **Set the time you want the Unit to turn on.**
   Each time you press theWAKE UP/SLEEP button, it changes the time shown on the display in the sequence shown at left and is added to the current time.

After selecting the time,wait about 5 seconds, and the CA-MXG9BK memorizes your setting.

- The WAKE UP timer indicator remains lit on the display to let you know that the WAKE UP timer is set.

To cancel the WAKE UP timer setting

Press the POWER button, and the WAKE UP timer indicator on the display will turn off.

To check the time remaining until the Unit turns on

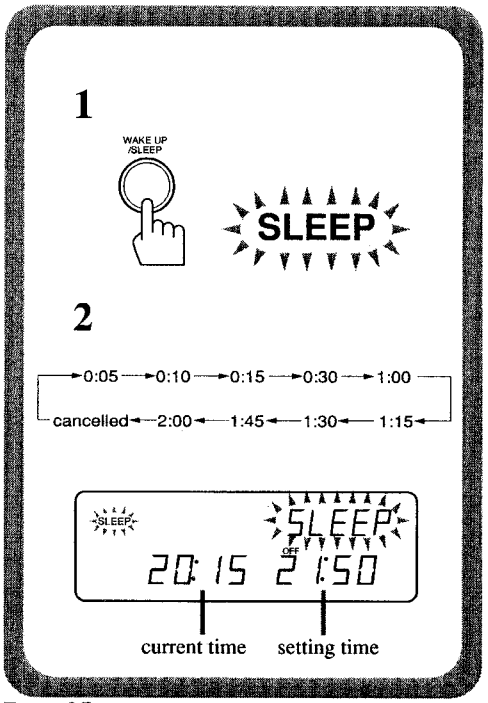
Press the WAKE UP/SLEEP button once.
The remaining time will be displayed for 5 seconds.

To change the set time

Press the WAKE UP/SLEEP button repeatedly.

Hints for using your WAKE UP Timer

- When the set time comes you will hear the most recently used source.
- The volume when the timer turns on the source is the volume last set when the CA-MXG9BK was used. This can be quite a surprise first thing in the morning, so you might want to reset it before going to sleep.
- If the CD is the most recently used source, it starts playing from the first track.



SLEEP Timer

Using this timer, you can fall asleep to music and know your CA-MXG9BK will turn off by itself rather than play all night.

- SLEEP timer can be set only when the Unit is turned on.

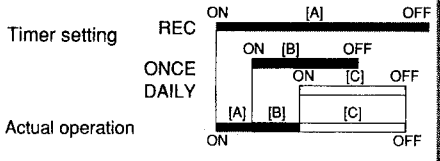
1. **With the CA-MXG9BK on and a source playing, press the WAKE UP/ SLEEP button.**
   The SLEEP indicator on the display will start blinking.

2. **Set the length of time you want the source to play before shutting off.**
   Each time you press the WAKE UP/SLEEP button while SLEEP is blinking, the time shown on the display changes as shown at left and is added to the current time.
   The Unit will now turn off after the time you set.

To cancel the Sleep Timer setting

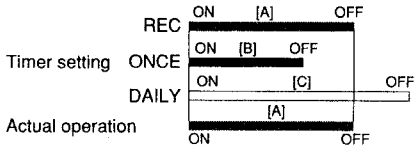
Simply turn the Unit off. SLEEP indication disappears from the display.

A

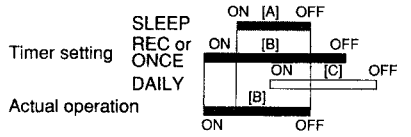


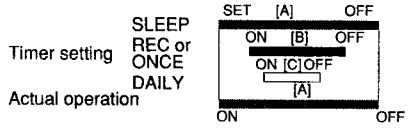
* [A], [B], and [C] indicate the different sources.

B



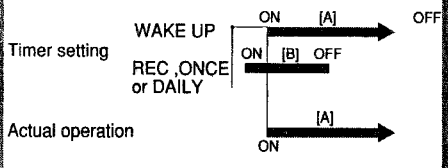
C





* Since the source cannot be selected for the SLEEPtimer, the source is always [B].

D



Timer Priority

Setting multiple timers within the same time range will make actual operation complicated.
The convenience and power of having several timers available can also create some complications. For instance, while the recording timer may be set to record a program from 8:00 am to 9:00 am, the Daily timer may be set to play a CD at 8:30 am. So will it interrupt the Radio recording, or will it just not come on, since timer recording is already on?
A little time spent understanding which timers have precedence, as explained below and with the charts on the left, will pay big dividends when using the timers.

A) If the Recording, ONCE, and DAILY timers are set within the same time range, each timer will come on at the time you have set. If another timer is already on, that timer will be shut off when the second timer starts. So if you are recording a radio broadcast with the Recording timer and the ONCE timer is set to start a different station playing during the recording, you will lose the recording at that point.

B) If the Recording, ONCE, and DAILY timers have the same starting time, the timer operation will be executed according to the following priority:
1. Recording timer
2. ONCE timer
3. DAILY timer

C) If the SLEEP timer has been set within the same time range as another timer, the other timer operation will be executed until the SLEEP timer shuts off the Unit. When the SLEEP timer shuts the Unit off, the SLEEP timer operation will take effect. Timer operations with starting times after the SLEEP timer's set time will not be executed. So be especially carefull when setting the time the SLEEP timer shuts off the Unit.

D) The WAKE UP timer operation will have priority over any other timer operation.

E) If the SLEEP timer and AUTO POWER OFF have been set within the same time range, the timer operation with the earlier ending time will have priority.

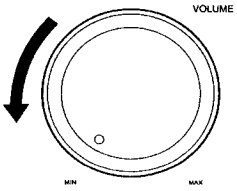
F) If a timer operation begins during AUTO POWER OFF, the timer operation will have priority.

G) If AUTO POWER OFF is used during a timer operation, AUTO POWER OFF will have priority.

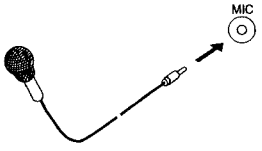
Vocal Masking (Sing Along)

Have you ever wished you could sing with a real band, in place of the lead singer? The VOC MASK button lets you use regular tapes, CDs or records as sources of sing-along music. When you press the VOC MASK button, the lead vocal is reduced, and you can replace it by singing into the microphone as the music plays.

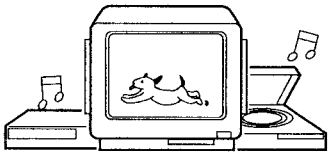
1



2

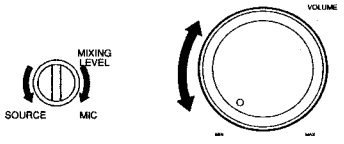


3



4

5



Setting the MIXING LEVEL

TOWARD	RESULT
SOURCE	Instrumental music source are emphasized
MIC	Your voice is emphasized

How to Sing Along with Vocal Masking

1. **Turn down the VOLUME control completely.**
2. **Attach the microphone (not supplied) by plugging it into the MIC jack in the amplifier section.**
3. **Start the source.**
   CD, tape, connected VCR, Record Player, etc.
4. **Press the VOC MASK button.**
   The LED on it will light up.
5. **Now adjust the volume of the source with the VOLUME control, and the volume of your voice with the MIXING LEVEL control as you sing into the microphone.**

Important information about Vocal Masking

- *You can change the tone level by using the KEY CTRL button.*
- *Because the radio signal is not as reliable as signals coming from a tape or CD, you may not always get satisfactory results using the radio as a source for Vocal Masking.*
- *With this method of vocal masking the sound in the middle of the stereo field, which is usually a vocal, is reduced without reducing the instrumental part. However, the voice part is not completely eliminated, only significantly reduced.*
- *Some tapes and CDs are better sources for singing along than others. Mono sources are not suitable for Vocal Masking.*
- *On sources with duets, strong echoes, a chorus, or with only a few instruments, the singer's voice may not be completely reduced.*
- *Poorly dubbed tapes may not work well for Vocal Masking.*

Using the Microphone Only

1. Attach the microphone.
2. Set the MIXING LEVEL to the MIC position.
3. Press the CD button from the source selecting buttons.
   If you hear the sound from a CD, press the STOP/CLEAR ■ button.
4. Adjust the VOLUME control.

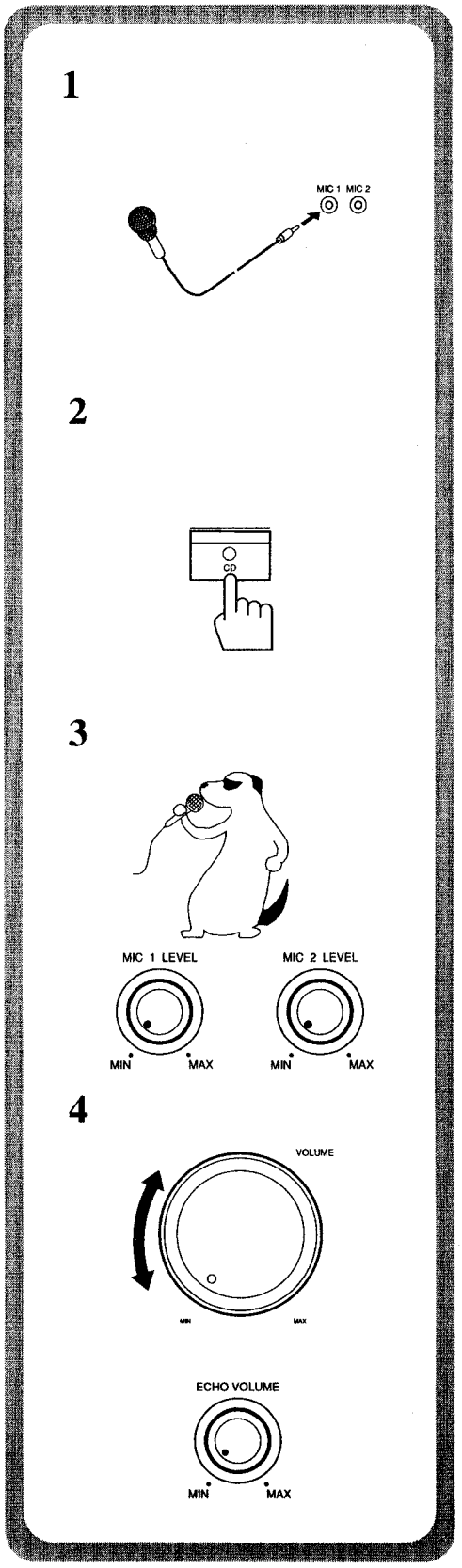
Recording from the Microphone

You can use the microphone for recording:
Sound going into the microphone is mixed with sound sent to the tape in deck B from some other source, such as the CD, or radio.
You cannot record your singing-along when the main source is a tape in deck A.
See the procedure for recording on page 8 in the Easy Guide section.

Note

To prevent howling and squealing when using the microphone, adjust the VOLUME control, and try not to point the microphone at the speakers.
When you are not using the microphone, disconnect it.

Sing Along with CD Graphics (using Optional VS-G3BK CD Graphics Decoder)



Vocal Masking with CD Graphics

You can connect an optional CD graphics decoder VS-G3BK and a TV to add graphics to your Karaoke. The various visual Backgrounds enhance Karaoke experience dramatically.

Preparation

- Connect the TV and the optional VS-G3BK (see page 4).
- Turn on the TV.

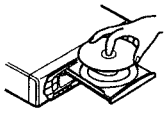
1. **Attach the microphone to the MIC jack on the optional VS-G3BK.**
2. **Press CD among the source selecting buttons on the CA-MXG9BK.**
3. **Sing a song or speak into the microphone.**
   You can use the MIC 1 LEVEL or MIC 2 LEVEL on theVS-G3BK to control the voice.
4. **Adjust the VOLUME on the CA-MXG9BK and ECHO VOLUME on the optional VS-G3BK.**

Handling and Maintenance

Compact Discs

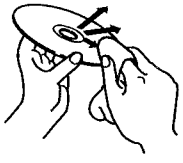
Handle your compact discs, cassette tapes, and tape deck carefully, and they will last a long time.

- Remove the CD from the case by holding it at the edges while pressing the center hole lightly.
- Do not touch the shiny surface of the CD, or bend the CD.



- Place the CD into the open tray with the label facing up.

- Put the CD back in its case after use to prevent warping.
- Be careful not to scratch the surface of the CD when placing it back in the case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



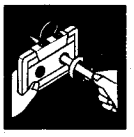
- A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.

CAUTION: Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean a CD.

In general, you will have the best performance by keeping your tapes, CDs, and the mechanism clean.

- Store tapes and CDs in their cases, and keep them in cabinets or on shelves.
- Keep the tape deck tape carriers and the CD tray closed when not in use.

Cassette Tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose it may get stretched, cut, or caught in the cassette.

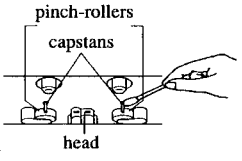
- Do not touch the tape surface.

- Do not store the tape:
  -In dusty places
  -In direct sunlight or heat
  -In moist areas
  -On a TV or speaker
  -Near a magnet

Tape Deck

- If the heads, capstans, and pinch-rollers of the tape deck become dirty, the following will occur:
  -Impaired sound quality
  -Discontinous sound
  -Fading
  -Incomplete erasure
  -Difficulty recording

- Clean the heads, capstans, and pinch-rollers using a cotton swab moistened with alcohol.



- If the heads become magnetized, they will produce noise or loose high frequencies.

- To demagnetize the heads, turn off the system, and use a head demagnetizer (available at electronics and record shops).

Troubleshooting

- If you are having a problem with your CA-MXG9BK, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the Unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Possible Cause	ACTION
No sound is heard.	Connections are incorrect, or loose.	Check all connections and make corrections. (See pages 4 – 6.)
Impossible to record.	Cassette record protect tabs are removed.	Cover holes on back edge of cassette with tape.
Hard to listen to broadcasts because of noise.	The antenna is disconnected. The loop antenna is too close to the system. The feeder/wire antenna is not properly extended and positioned.	Re-connect the antenna securely. Change the position and direction of the loop antenna. Extend feeder/wire antenna at the best reception position.
The CD sound is discontinuous.	The CD is scratched or dirty.	Clean or replace the CD.
Unable to operate the Remote.	The path between the Remote and the sensor on the Unit is blocked. The batteries are discharged.	Remove the obstruction. Replace the batteries.
The CD tray cannot be operated.	The main AC power cord is not plugged in.	Plug in the AC power plug.
The CD does not play.	The CD is upside down.	Put the CD in with the label side up.
Operations are disabled.	The built in microprocessor may malfunction due to external electrical interference.	Unplug the system then plug it back in.
The cassette holder cannot be opened.	The system was turned off because the timer was operated while the tape was running.	Turn on the system.

Specifications (Design and specifications subject to change without notice.)

Amplifier
Output Power (IEC 263-3/DIN)
- FRONT SPEAKERS A: 18 watts per channel into 6 ohms at 80 Hz with 0.9% total harmonic distortion.
- FRONT SPEAKERS B/C: 13.5 watts per channel, min. RMS, both channels driven into 8 ohms at 1 kHz (DIN)
- Total HarmonicDistortion at Half-Rated Power: 0.05%
- Audio Input Sensitivity/Impedance (1 kHz)
  - PHONO: 3.0 mV/50 kohms
  - VIDEO: 300 mV/50 kohms
  - VCR/DCC/MD: 300 mV/50 kohms
  - AUX: 300 mV/50 kohms
- Audio Output Load/Impedance
  - VCR/DCC/MD: 200 mV/2.5 kohms
- Video Input
  - VIDEO: 1 Vp-p/75 ohms
  - VCR: 1 Vp-p/75 ohms
  - CD-G: 1Vp-p/75 ohms
- Video Output
  - MONITOR: 1Vp-p/75 ohms
  - VCR: 1Vp-p/75 ohms

Tuner
FM
- Tuning Range: 87.5 – 108.0 MHz
- Usable Sensitivity: 0.95 µV/75 ohms (10.8 dBf)
- Signal-to-Noise Ratio (IHF-A weighted/DIN): MONO (at 85 dBf) 80 dB, STEREO (at 85 dBf) 73 dB/64 dB

AM
- Tuning Range: 531 – 1,602 kHz (9 kHz step), 530 – 1,600 kHz (10 kHz step)
- Dimensions (WxHxD): 275 x 124 x 299 mm (10 - 7/8 x 5 x 11 - 7/8 in.)
- Weight: 5.3 kg (14.8lbs)

Tape deck
- Frequency response
  - Normal: 30 – 15,000 Hz
  - CrO_2: 30 – 16,000 Hz
  - Metal: 30 – 17,000 Hz
- Wow and Flutter (WRMS/DIN): 0.09%/0.2%
- Dimensions (WxHxD): 275 x 124 x 267 mm (10 - 7/8 x 2 - 3/4 x 10 -5/8 in.)
- Weight: 2.9 kg (6.5 lbs)

Compact Disc Player
- Dynamic Range (1 kHz): 90 dB
- Signal-to-Noise Ratio: 100 dB
- Wow and Flutter: Unmeasurable
- Dimensions (WxHxD): 275 x 90 x 275 mm (10 - 7/8 x 3 - 5/8 x 10 - 7/8 in.) (Maximum depth 415 mm (16-7/16 in.) with the CD tray open)
- Weight: 2.2 kg (4.8 lbs)

Graphic Equalizer
- SEA Center frequencies: 63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz 6.3 kHz, 16 kHz
- SEA Control Range: ±12 dB ±1 dB
- Dimensions (WxHxD): 275 x 90 x 267 mm (10 - 7/8 x 3 - 5/8 x 10 - 5/8 in.)
- Weight: 1.6 kg (3.6 lbs)

Power Specifications
- Line Voltage & Frequency: AC110–115V/220–230V∿, selectable, 50/60 Hz
- Power Consumption: 185 watts

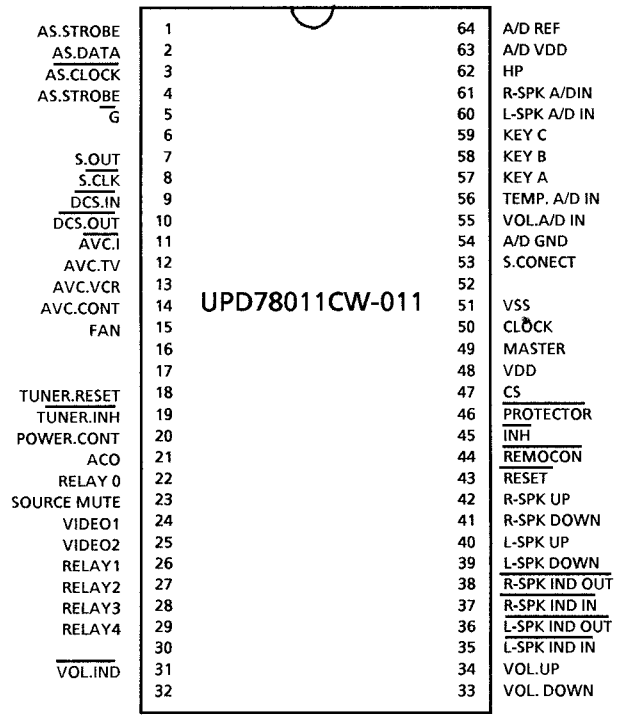
Supplied Accessories
- FM feeder antenna (1)
- AM loop antenna (1)
- Remote control (RM-SEMXG9U) (1)
- Batteries R03(UM-4)/AAA(24F) (2)
- AC plug adaptor (1)
- Antenna adaptor (1)

Optional Speakers SP-MXG9BK
- Type: 3-way 4 speakers bass reflex type
- Speakers
  - Low range Super woofer: 17.5 cm (6-15/16 in.) cone x 1
  - Mid/High range Tweeter: 3.0 cm (1-3/16 in.) cone x 1
  - Full range: 9.5 cm (3-3/4 in.) cone x 1
  - Full range Motor driven: 9.5 cm (3-3/4 in.) cone x 1
- Sound pressure level
  - Low range: 86 dB/w.m
  - Mid/High range: 86 dB/w.m
  - Full range: 86 dB/w.m
- Power handling capacity
  - Low range: 30 watts
  - Mid/High range: 25 watts
  - Full range: 25 watts
- Frequency Range
  - Low range: 38 Hz–8,000 Hz
  - Mid/High range: 120 Hz–20,000 Hz
  - Full range: 120 Hz–20,000 Hz
- Rated Impedance
  - Low range: 6 ohms
  - Mid/High range: 8 ohms
  - Full range: 8 ohms
- Dimensions (WxHxD): 230 x 426 x 281 mm (9 - 1/16 x 16 - 3/16 x 11 - 3/16 in.)
- Weight: 7.5 kg (16.6lbs) each
- Supplied Accessory: Speaker cords (2)

Description of ICs

■ UPD78011CW-011 (IC701) : System controller

1. Terminal Layout



2. Key input (KEY A~C)

KEY A	KEY B	KEY C
AUTO LOUDNESS	SOURCE DIRECT	TUNER ENTRY
VIDEO	VCR	AUTO POWER OFF
CD/CDG	PHONO	–
AUX	TUNER	–
TAPE	POWER	–

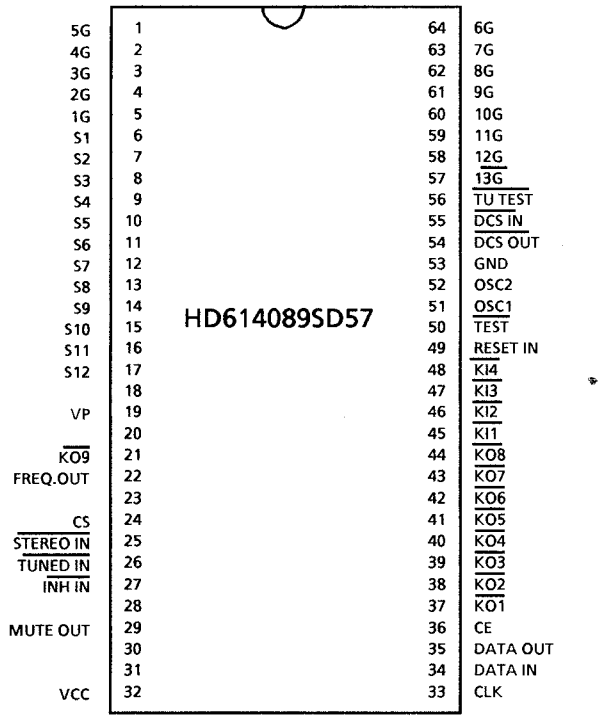
3. Pin Functions

Pin No.	Symbol	I/O	Functions
1	AS STROBE	O	Strobe for data transmission to IC201 and IC203
2	AS DATA	O	Switch data to IC201 and IC203
3	AS CLOCK	O	Clock for data transmission
4	AS. STROBE	O	Strobe for IC902 and IC903
5	G	O	Ehable for IC902 and IC903
6,16, 17,32		--	Connected to GND
7	S. OUT	O	Data for IC902 and IC903
8	S.CLK	O	Data latch clock for IC902 and IC903
9,10	DCS IN/OUT	I/O	Compulink signal
11~14	AVC.I/TV/ VCR/CONT	--	Non connection
15	FAN	O	Fan control signal
18	T.RESET	O	Tuner reset signal
19	T.INH	O	Tuner inhibit signal
20	P.CONT	O	Power on : H (Cassette deck , DSP control)
21	ACO	O	Regulator control (Power on : H)
22	RELAY 0	O	Relay control signal for main speaker
23	SOURCE MUTE	O	Mute (Power on/off , Changing source)
24,25	VIDEO1,2	O	Video selector control
26~29	PLAY1~4	O	Speaker matrix control
30	SPK POWER	O	Power control for panorama speaker
31	VOL IND	O	Indication control

Pin No.	Symbol	I/O	Functions
33,34	VOL. DOWN/UP	O	Volume control signal
35~38	L(R)-SPK IND IN/OUT	I/O	Indication of left (right) panorama speaker
39~42	L(R)-SPK DOWN/UP	O	Panorama speaker control
43	RESET	I	Reset signal
44	REMOCON	I	Remote control signal input
45	INH	I	Inhibit signal input
46	PROTECTOR	I	Input from protector
47	CS	I	Chip select
48 63	VDD A/D VDD	--	Power supply
49,50	M. CLOCK	--	Oscillation terminal
51 54	VSS A/D GND	--	GND
52		--	Non connection
53	S.CONNECT	--	Connected to +5V
55	VOL A/D IN	I	Observing the position of master volume
56	TEMP A/D IN	I	Sensing temperature
57~59	KEY A~C	I	Key input
60,61	R(L)-SPK A/D IN	I	Observing the position of the right (left) speaker
62	HP	I	Observing the connect of the headphone
64	A/D REF	I	Reference voltage for inner A/D converter

■ HD614089SD57 (IC901) : Tuner Controller

1. Terminal Layout



2. Key matrix

	KI 1 (PIN45)	KI 2 (PIN46)	KI 3 (PIN47)	KI 4 (PIN48)
KO 1 (PIN37)	WAKE UP /SLEEP	ONCE TIMER	DAILY TIMER	REC TIMER
KO 2 (PIN38)	—	CLOCK ADJ.	CANCEL	MEMORY
KO 3 (PIN39)	UP	DOWN	PRESET UP	PRESET DOWN
KO7 (PIN43)	PRESET SCAN	AUTO /MONO	FM	AM
KO 8 (PIN44)	*1 BAND0	—	*2 9k/10k	*3 24H/12H

(NOTE)

	U	A	EF,EN	BS	G	GI
*1	USED	NONE	NONE	NONE	NONE	NONE
*2	USED	NONE	NONE	NONE	NONE	NONE
*3	NONE	NONE	NONE	NONE	NONE	USED

3. Pin Functions

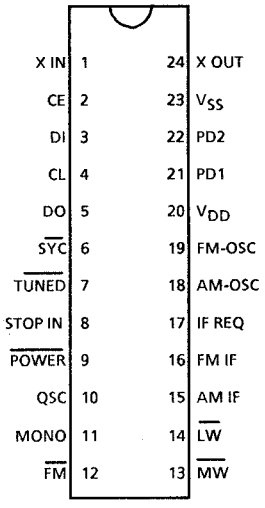
Pin No.	Symbol	I/O	Functions	Pin No.	Symbol	I/O	Functions
1~5	5G~1G	O	Grid control	32	VCC	--	Power supply
6~17	S1~S12	O	Segment control	33	CLK	O	Clock for PLL synthesizer
18	—	--	Non cennection	34	DATA IN	I	Data from PLL synthesizer
19	VP	I	Power supply for FL display	35	DATA OUT	O	Data for PLL synthesizer
20	—	--	Non connection	36	CE	O	Chip enable signal for PLL synthesizer
21	KO9	--	Non connection	37~44	KO1~KO8	O	Key matrix output
22	FREQ OUT	O	Clock frequency	45~48	KI1~KI4	I	Key matrix input
23	—	--	Non connection	49	RESET IN	I	Reset signal input
24	CS	--	Connected to +5V	50	TEST	I	Test mode terminal
25	STEREO IN	I	For the indication of 'STEREO'	51,52	OSC I,OSC2	--	Oscillation terminal
26	TUNED IN	I	For the indication of 'TUNED'	53	GND	--	GND
27	INH IN	I	Inhibit input	54	DCS OUT	O	Compulink signal output
28	—	--	Non connection	55	DCS IN	I	Compulink signal input
29	MUTE OUT	O	Muting tuner sound	56	TU TEST	I	Test mode terminal
30,31	—	--	Non connection	57~64	13G~6G	O	Grid control signal

■ LC7218 (IC102) : PLL Synthesizer

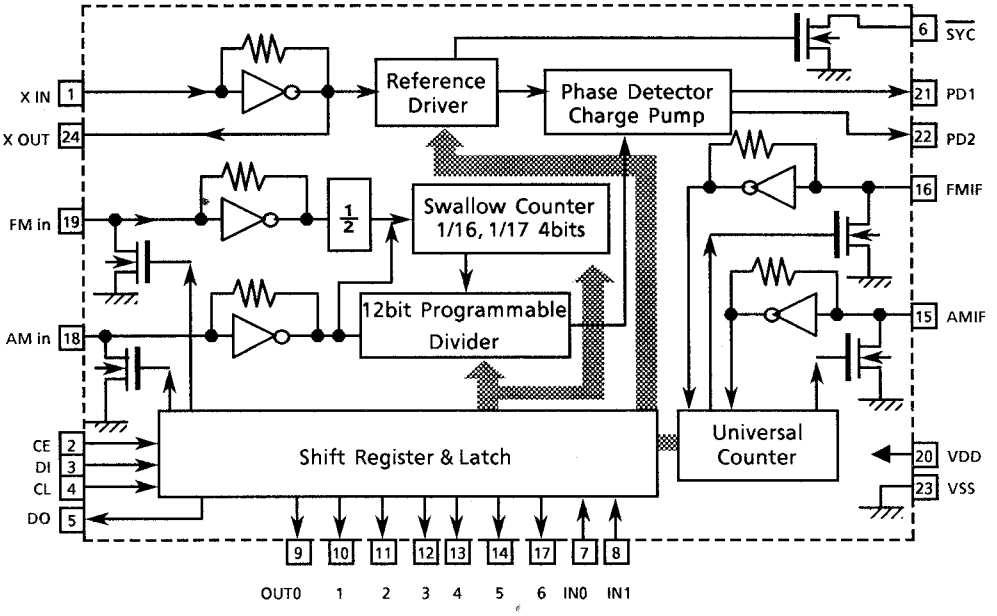
1. The main function descriptions

(1) It makes the local oscillation frequency by the control data from IC901.
(2) Decode the control signal and transmit the signal for receiving conditions.
(3) For the best tuning, count the internal-frequency and transmit the data to IC901.

2. Terminal Layout



3. Block Diagram



4. Pin Functions

Pin No.	Symbol	I/O	Functions
1,24	X in , X out	I/O	Crystal oscillator (7.2MHz).
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	DI	I	Receive the control data from the controller (IC901).
4	CL	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	DO	O	Transmit the data from LC7218 to the controller which is synchronized with CL.
6	SYC	—	Not used.
7	TUNED	I	Receive the tuned signal from IC104 (LA1266A).
8	STOP IN	—	Connected to GND
9	POWER	—	Not used.
10	QSC	—	Not used.
11	MONO	O	It is "H" on FM-monaural, "L" on FM-Stereo.
12	FM	O	It is "L" on FM mode.
13	MW	O	It is "L" on MW mode.
14	LW	O	It is "L" on LW mode.
15	AM-IF	I	Universal counter input for AM-IF from IC104 (LA1266A).
16	FM-IF	I	Universal counter input for FM-IF from IC104(LA1266A).
17	IF REQ	O	Output the "IF-signal request" to IC104 when the pin-7 (tuned in) goes to "H".
18	AM OSC	I	Input the local oscillator signal of AM.
19	FM OSC	I	Input the local oscillator signal of FM.
20	V_{DD}	—	This is a terminal of power supply.
21	PD1	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	—	Not used.
23	Vss	—	Connected to GND

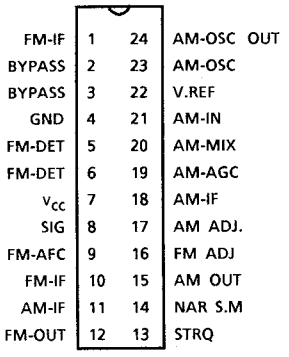
■ LA1266A (IC104) : FM AM IF AMP & detector

1. The main function descriptions

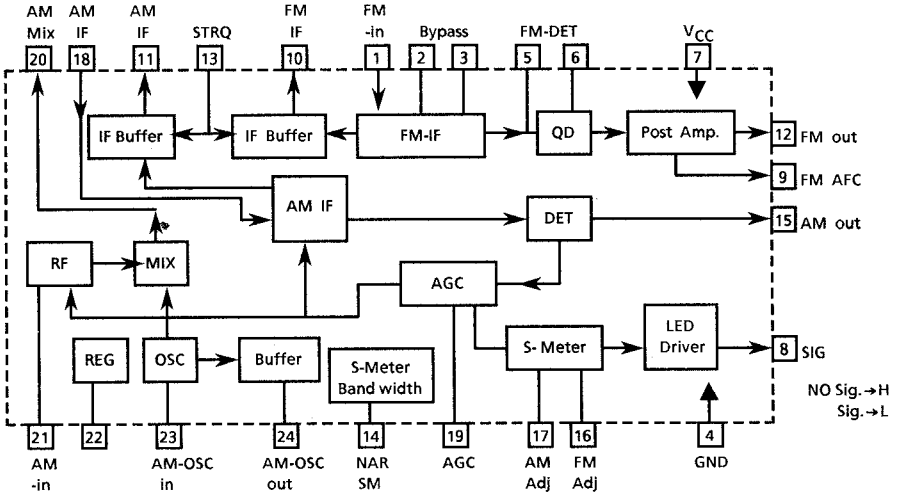
(1) Amplify and detect of FM intermodulation frequencies.

(2) It has local oscillator and mixer for AM, and amplify the AM-IF signal.

2. Terminal Layout


FM-IF 1 24 AM-OSC OUT
BYPASS 2 23 AM-OSC
BYPASS 3 22 V.REF
GND 4 21 AM-IN
FM-DET 5 20 AM-MIX
FM-DET 6 19 AM-AGC
Vcc 7 18 AM-IF
SIG 8 17 AM ADJ.
FM-AFC 9 16 FM ADJ
FM-IF 10 15 AM OUT
AM-IF 11 14 NAR S.M
FM-OUT 12 13 STRQ

3. Block Diagram



4. Pin Functions

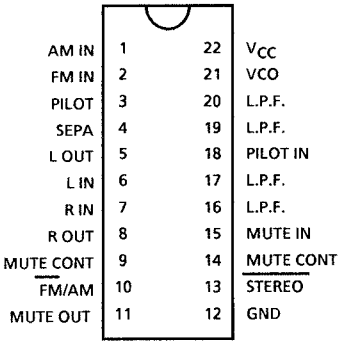
Pin No.	Symbol	I/O	Functions
1	FM IN	I	This is an input terminal of FM IF signal.
2,3	BYPASS	--	Bypass of FM IF amp.
4	GND	--	This is the device ground terminal.
5,6	FM DET	--	FM detect transformer.
7	V_{CC}	--	This is the power supply terminal.
8	SIG	O	When the machine is tunning ,this terminal becomes "L".
9	FM AFC	O	This is an output terminal of voltage for FM - AFC(Auto frequency control).
10	FM IF	O	When the signal of IF REQ of IC102(LC7218) appear, the signal of FM IF output.
11	AM IF	O	When the signal of IF REQ of IC102(LC7218) appear, the signal of AM IF output.
12	FM OUT	O	FM composite signal out
13	STRQ	I	The IF-signals come out from pin10 (FM-IF) or pin11 (AM-IF) while this terminal going to "High".
14	NAR SM	--	Control the Band-width of signal meter.
15	AM OUT	O	AM signal out
16	FM ADJ	--	For adjusting the stop level (or mute level) of FM.
17	AM ADJ	--	For adjusting the stop level (or mute level) of AM.
18	AM-IF	I	Input of AM IF signal.
19	AM-AGC	I	This is an AGC voltage input terminal for AM.
20	AM-MIX	O	This is an output terminal for AM mixer.
21	AM-IN	I	This is an input terminal for AM RF signal.
22	V.REF	--	Resistor value between pin9 and pin22 desides the frequency width of the input signal.
23	AM-OSC	--	This is a terminal of AM Local oscillation circuit.
24	AM-OSC OUT	O	AM Local Oscillation Signal output.

■ LA3401 (IC105) : FM MPX Detector

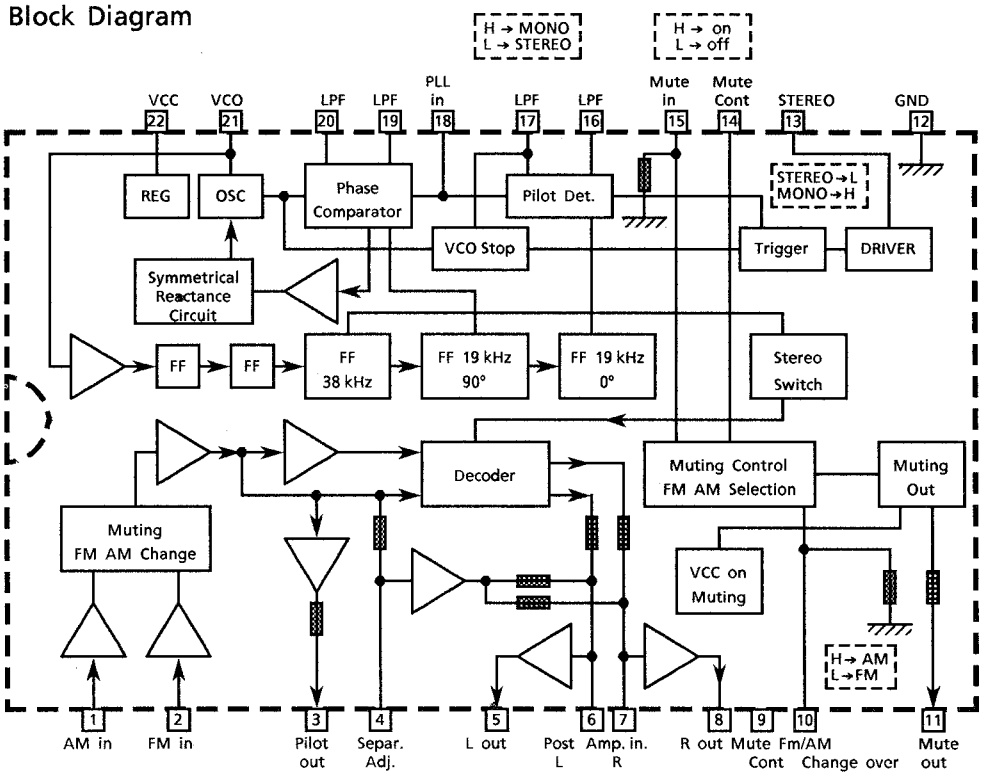
1. The main function descriptions

(1) Detect the FM multiplex signal (Stereo signal).
(2) When receiving FM stereo signal, it outputs the signal for indication.
(3) AM/FM audio amplifier.

2. Terminal Layout



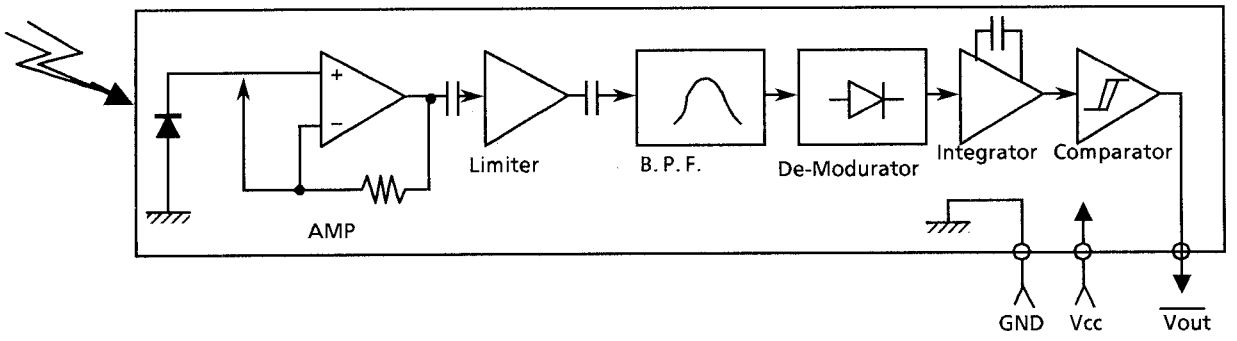
3. Block Diagram



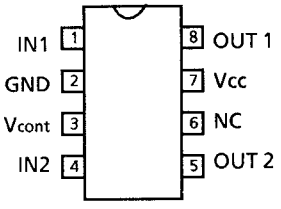
4. Pin Functions

Pin No.	Symbol	I/O	Functions
1	AM IN	I	This is an input terminal for AM signal.
2	FM IN	I	This is an input terminal for FM composite signal.
3	PILOT OUT	O	Output of MPX pilot signal (Connect to Pin18).
4	SEPA. ADJ.	--	Separation adjustment.
5	L. OUT	O	Left channel signal output.
6	L	I	Input terminal of the left channel post-amplifier
7	R	I	Input terminal of the right channel post-amplifier
8	R. OUT	O	Right channel signal output
9	MUTE CONT	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	FM / AM	I	Change over the FM / AM input. "H" : AM, "L" : FM
11	MUTE OUT	---	Not used
12	GND	--	Ground terminal.
13	STEREO	O	Stereo indicator output. Stereo : "L", Mono : "H"
14	MUTE CONT	--	The mute time is controlled by the connected capacitor when changing over the FM / AM .
15	MUTE IN	I	Mute signal input. "H" : Mute on, "L" : Mute off.
16	LPF	--	Low pass filter of pilot detector.
17	LPF	--	While this terminal goes to "H", the VCO stops.
18	PILOT IN	I	Pilot signal input
19	LPF	--	Low-pass filter of PLL.
20	LPF	--	Low-pass filter of PLL.
21	VCO	I	Voltage controlled oscillator terminal.
22	V_{CC}	--	Power supply.

■ GP1U901X (IC904) : Receiver for Remote Control



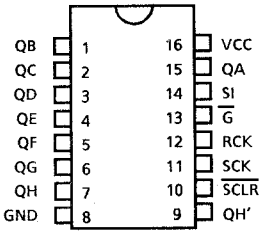
■ LB1639-CV (IC702,703,704) : Motor Driver



IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

■ TC74HC595AP (IC902,903) : 8-Bit Shift Register

1. Terminal Layout



2. Function Table

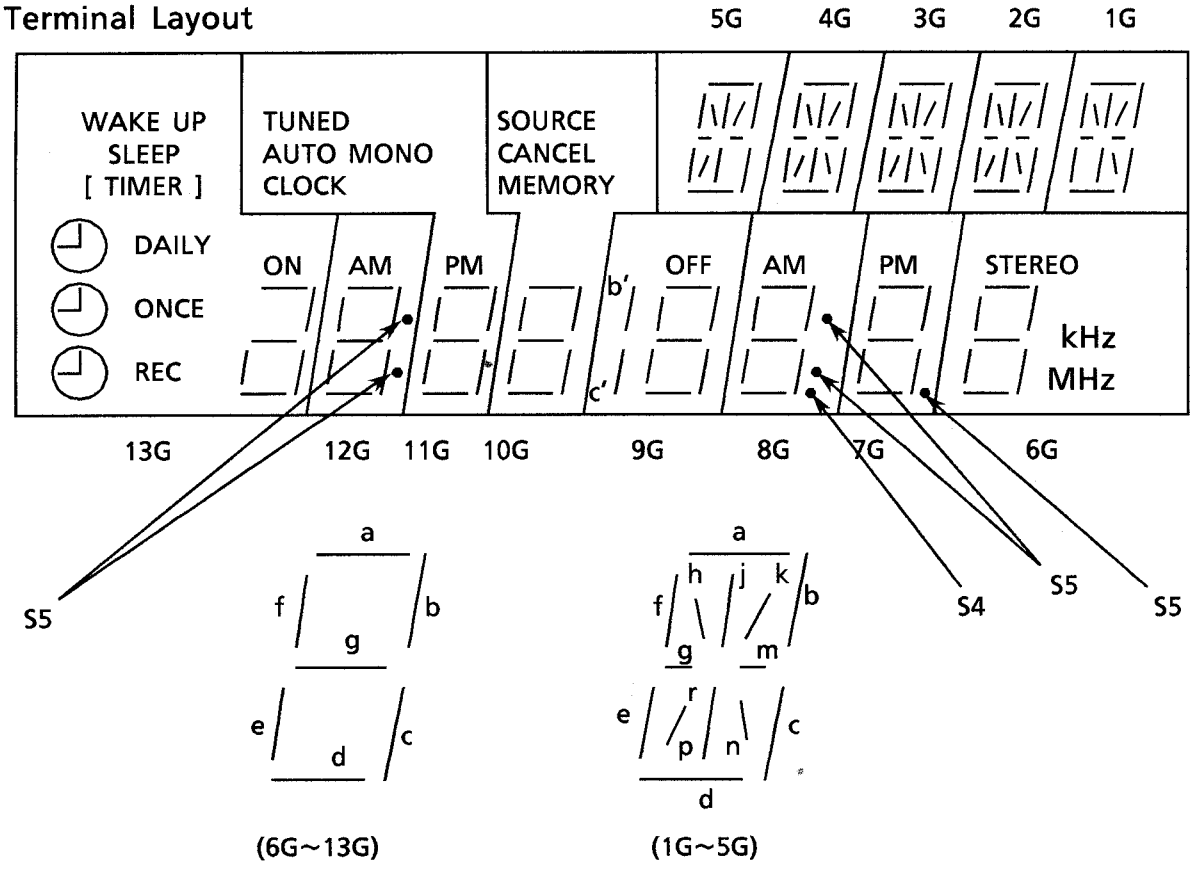
Inputs					Functions
SI	SCK	SCLR	RCK	G	
X	X	X	X	H	Output (QA-QH) disable.
X	X	X	X	L	Output (QA-QH) enable.
X	X	L	X	X	Shift register is cleared.
L	↑	H	X	X	Condition of shift register in initial stage is "L". In the other stages, data from the former stage is stored.
H	↑	H	X	X	Condition of shift register in initial stage is "H". In the other stages, data from the former stage is stored.
X	↓	H	X	X	Shift register does not change.
X	X	X	↑	X	Shift register data is stored in the storage register.
X	X	X	↓	X	Shift register does not change.

X : Don't care

Internal Wiring of FL Display

■ ELU0001-139 : (FL901)

1. Terminal Layout



2. Anode Connection Table

	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
S1	d	d	d	d	d	d	d	d	d	d	d	d	d
S2	---	e	e	e	e	e	e	e	e	e	e	e	e
S3	c	c	c	c	c	c	c	c	c	c	c	c	c
S4	g	----	TUNED	----	b' c'	DP (.)	----	kHz	r	r	r	r	m
S5	b	DP(:)	AUTO	SOURCE	----	DP (:)	DP (.)	MHz	m	n	n	n	n
S6	DAILY&MARK	----	MONO	----	----	----	----	----	j p	j p	j p	j p	j p
S7	ONCE&MARK	g	g	g	g	g	g	g	g	g m	g m	g m	g
S8	REC&MARK	f	f	f	f	f	f	f	f	f	f	f	f
S9	WAKEUP	b	b	b	b	b	b	b	b	b	b	b	b
S10	SLEEP	a	a	a	a	a	a	a	a	a	a	a	a
S11	ON	----	CLOCK	CANCEL	OFF	----	----	----	h	h	h	h	h
S12	[TIMER]	AM	PM	MEMORY	----	AM	PM	STEREO	k	k	k	k	k

3. Pin Connections

Terminal No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
ELECTRODE	F1	F1	NP	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G				
Terminal No						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ELECTRODE						P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	NP	F2	F2

F : Filament G : Grid P : Anode NP : No Pin

Disassembly Procedures

■ Removing the metal cover

1. Remove the 2 screws Ⓐ fastening the both sides of the cover and 4 screws Ⓑ fixing the back of the cover to remove the cover.

■ Removing the front panel assembly

1. Remove the metal cover.
2. Remove the master volume knob to remove the nut fixing the volume. Disconnect the connector of the volume indicator at the same time.
3. Disconnect the connectors JB901, J202, J203, J204 and J205.
4. Remove the screw Ⓒ and release the 3 hooks to remove the assembly.

■ Removing the rear panel

1. Remove the 15 screws Ⓓ.
2. Disconnect the connector J703.
3. Release the 2 hooks to remove the rear panel.

※ When installing the rear panel, arrange the wire from the fan so that the wire does not disturb the fan operation (Figure 2).

■ Removing the main circuit board

1. Remove the front panel assembly.
2. Disconnect the connectors JB801 and J802.
3. Remove the rear panel.
4. Remove the 7 screws fixing the main circuit board to remove the circuit board.(If neccesary, remove the circuit boards on the main circuit board.)

■ Removing the front circuit board

1. Remove the front panel assembly.
2. Remove the balance and twin bass knobs.
3. Remove the 9 screws Ⓕ,Ⓖ fixing the front circuit board to remove the circuit board.

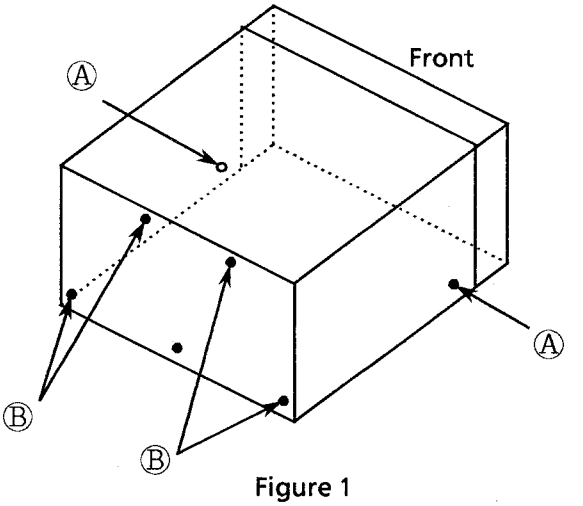


Figure 1

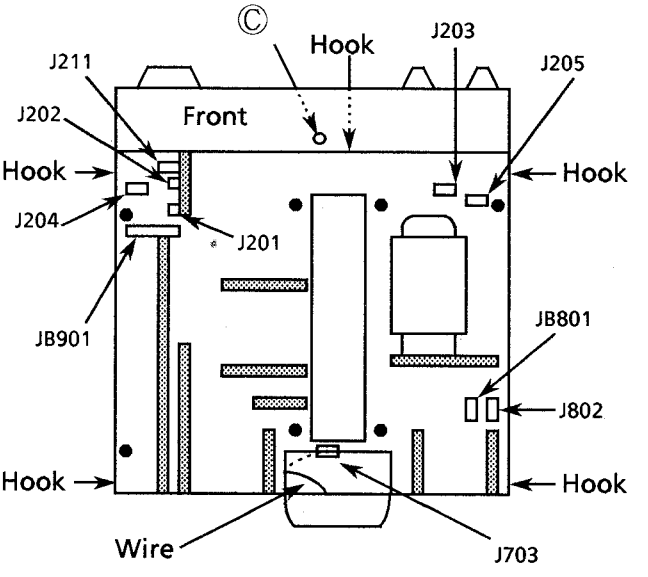


Figure 2 Top view

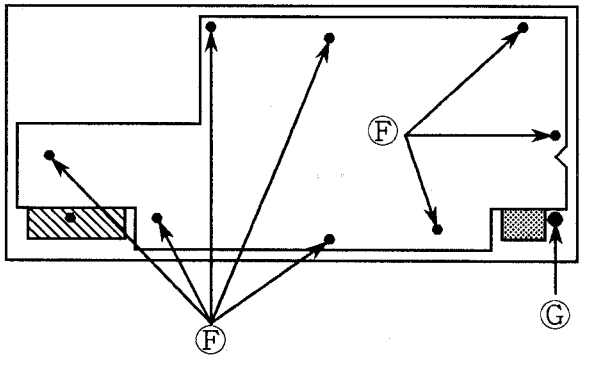


Figure 4 Behind the front panel assembly

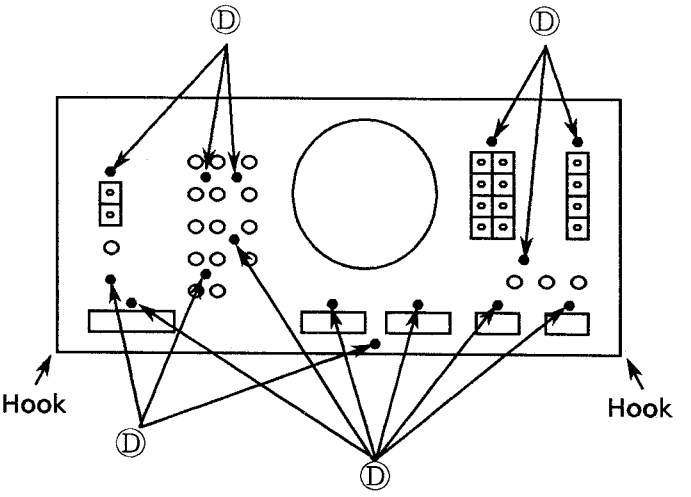
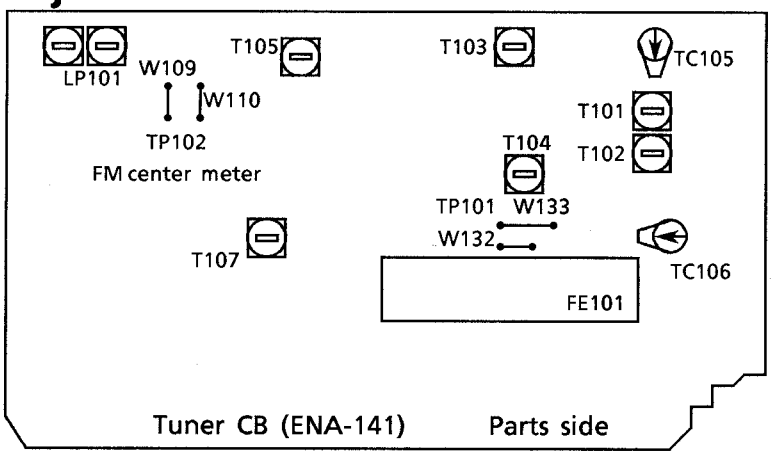


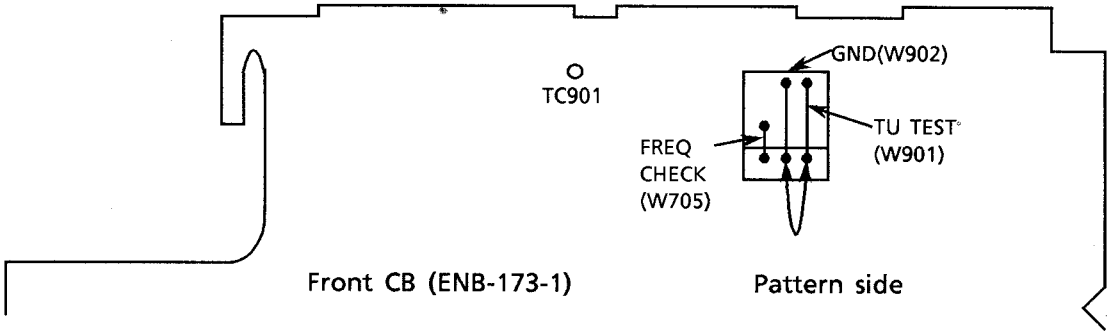
Figure 3 Rear panel

Adjustment Procedures



Clock Adjustment

1. After connecting W901 and W902 with some wire, connect ac power cord into ac outlet.
2. Confirm that the display is off and remove the wire.
3. Connect a frequency counter to W705 and W902.
4. Adjust TC901 so that the frequency becomes 34952.5±0.15Hz.



(1) Tuning voltage

Confirm the voltages at TP101 is within the standard values shown in the table below. If the voltages are not satisfied, replace FE101 for FM, adjust T103 for MW and adjust T104 for LW.

FM Tuning voltage (Unit : V)

Area	Frequency			
	64.0MHz	74.0MHz	87.5MHz	108MHz
East Europe	—	—	—	—
the U.K., Continental Europe, Australia, Universal	—	—	1.6±1.0 (V)	8.0±2.0 (V)

AM Tuning voltage (Unit : V)

Area	Frequency (MW)				Frequency (LW)		
	522kHz	531kHz	1602kHz	1629kHz	144kHz	290kHz	353kHz
Italy	0.9±0.2	—	—	7.5±0.8	0.8±0.4	5.7±0.6	—
the U.K., Continental Europe	0.9±0.2	—	—	7.5±0.8	0.8±0.4	—	8.0±0.9
Australia	0.9±0.2	—	—	7.5±0.8	—	—	—
Universal (Chanel space 9kHz)	—	1.0±0.2	7.2±0.7	—	—	—	—

(2) FM center meter

Receive a broadcast by using the function of 'AUTO STOP'.

Adjust T105 (detector coil) so that the voltage at TP102 becomes 0±1.5mV.

(3) MW Tracking

Adjust T101 (antenna coil) to obtain the best receiving sensitivity on 603kHz.

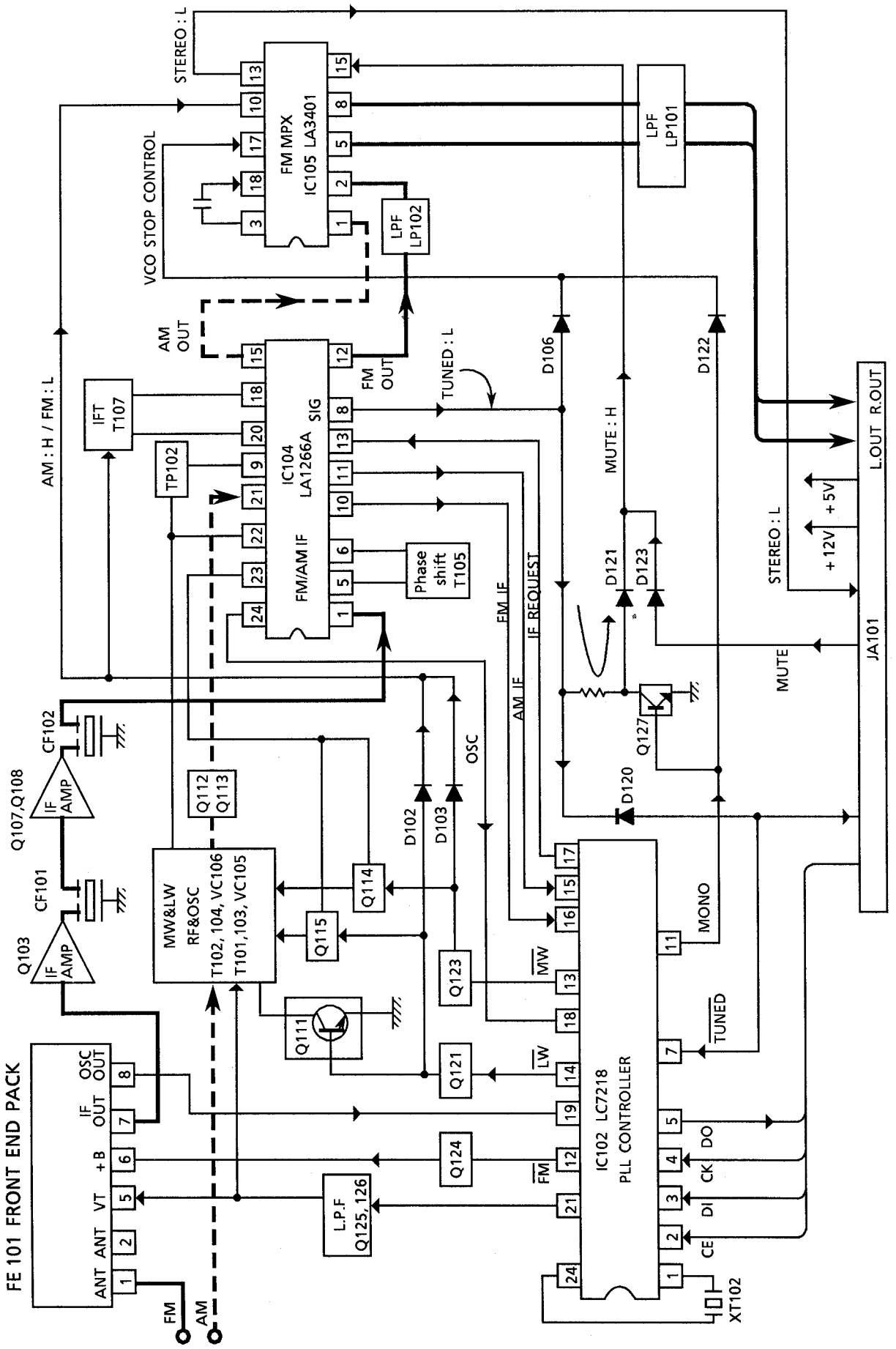
Adjust TC105 (antenna trimmer) to obtain the best receiving sensitivity on 1404kHz.

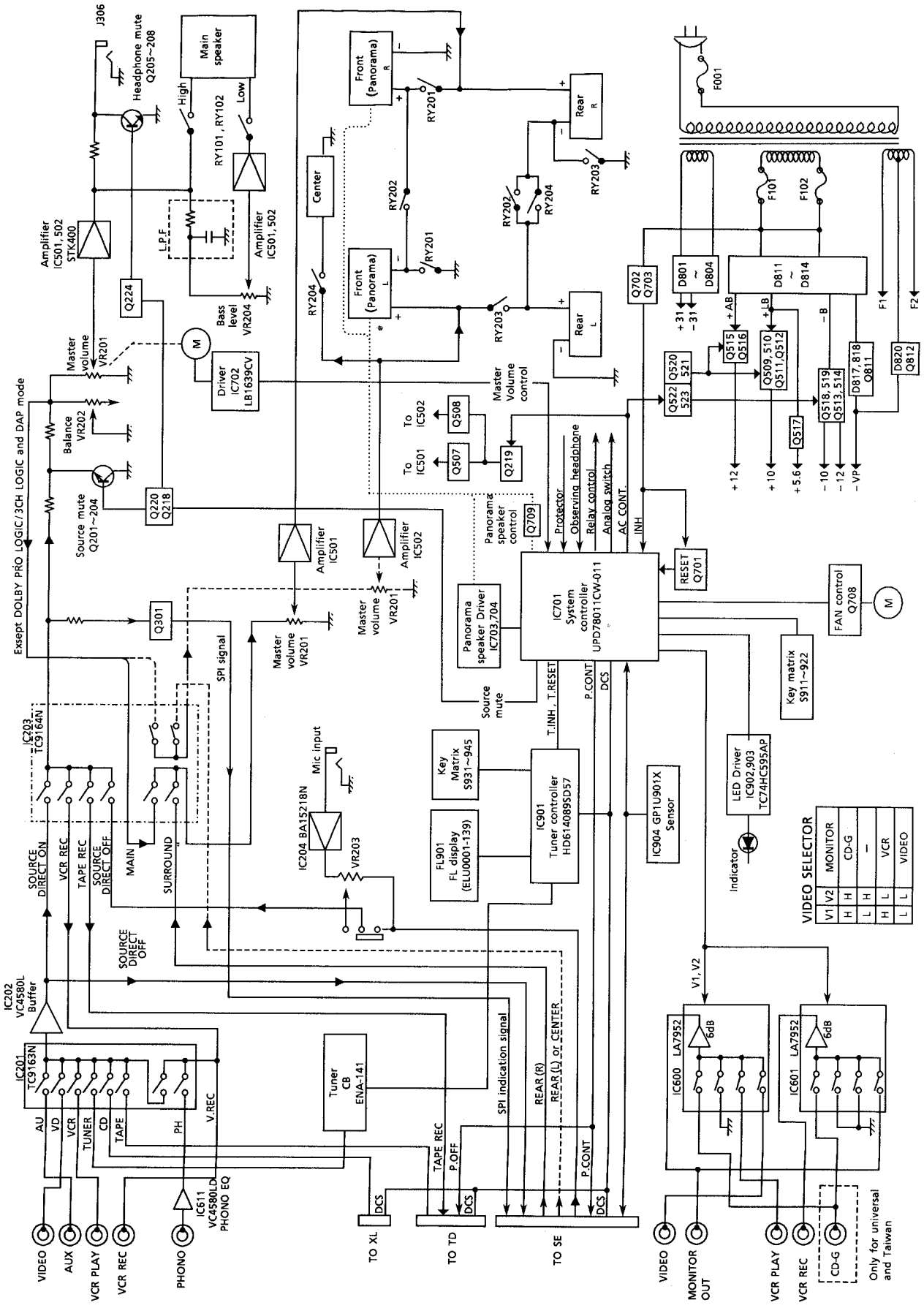
(4) LW Tracking

Adjust T102 (antenna coil) to obtain the best receiving sensitivity on 164kHz.

Adjust TC106 (antenna trimmer) to obtain the best receiving sensitivity on 353kHz or 245kHz.

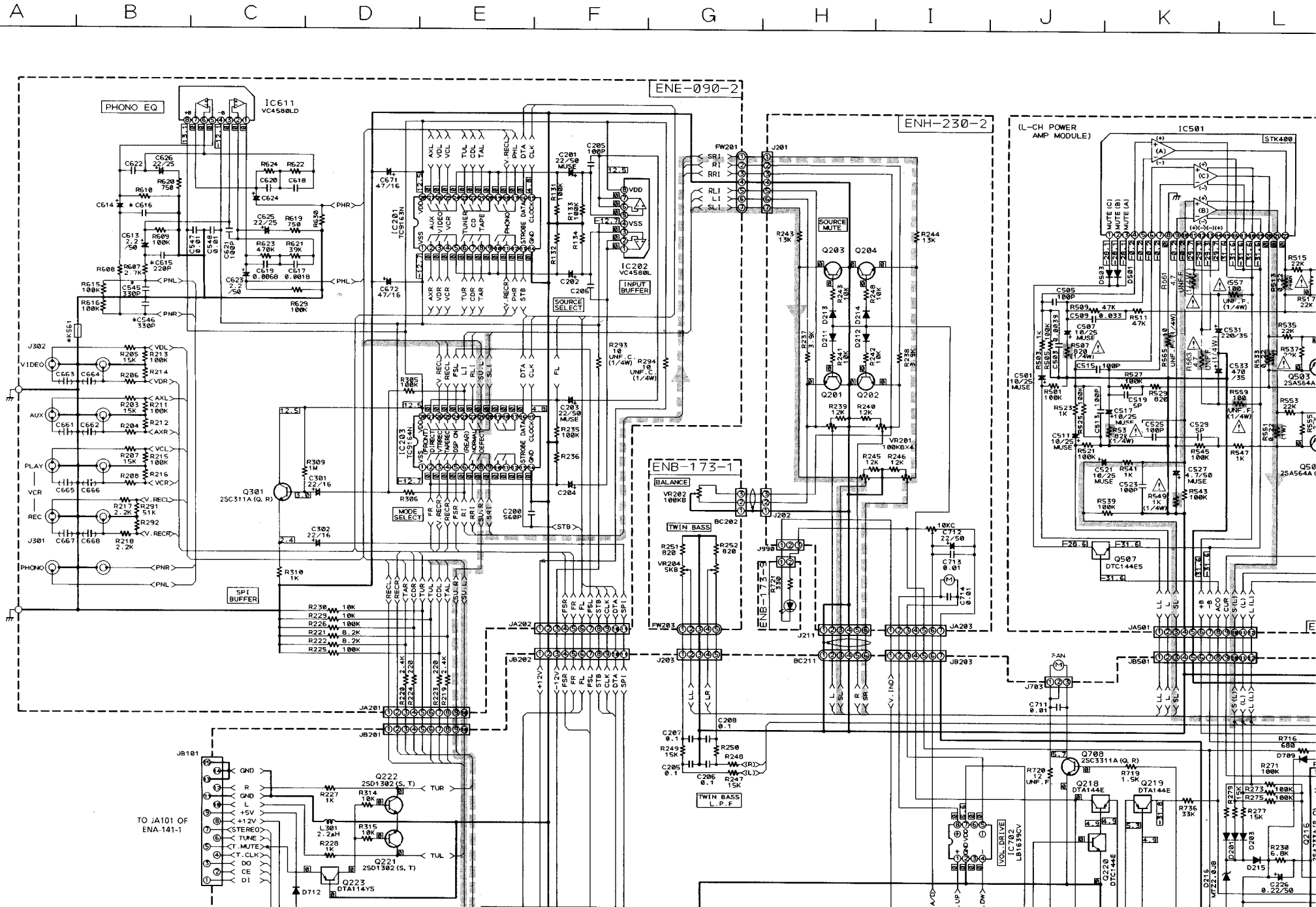
Block Diagram

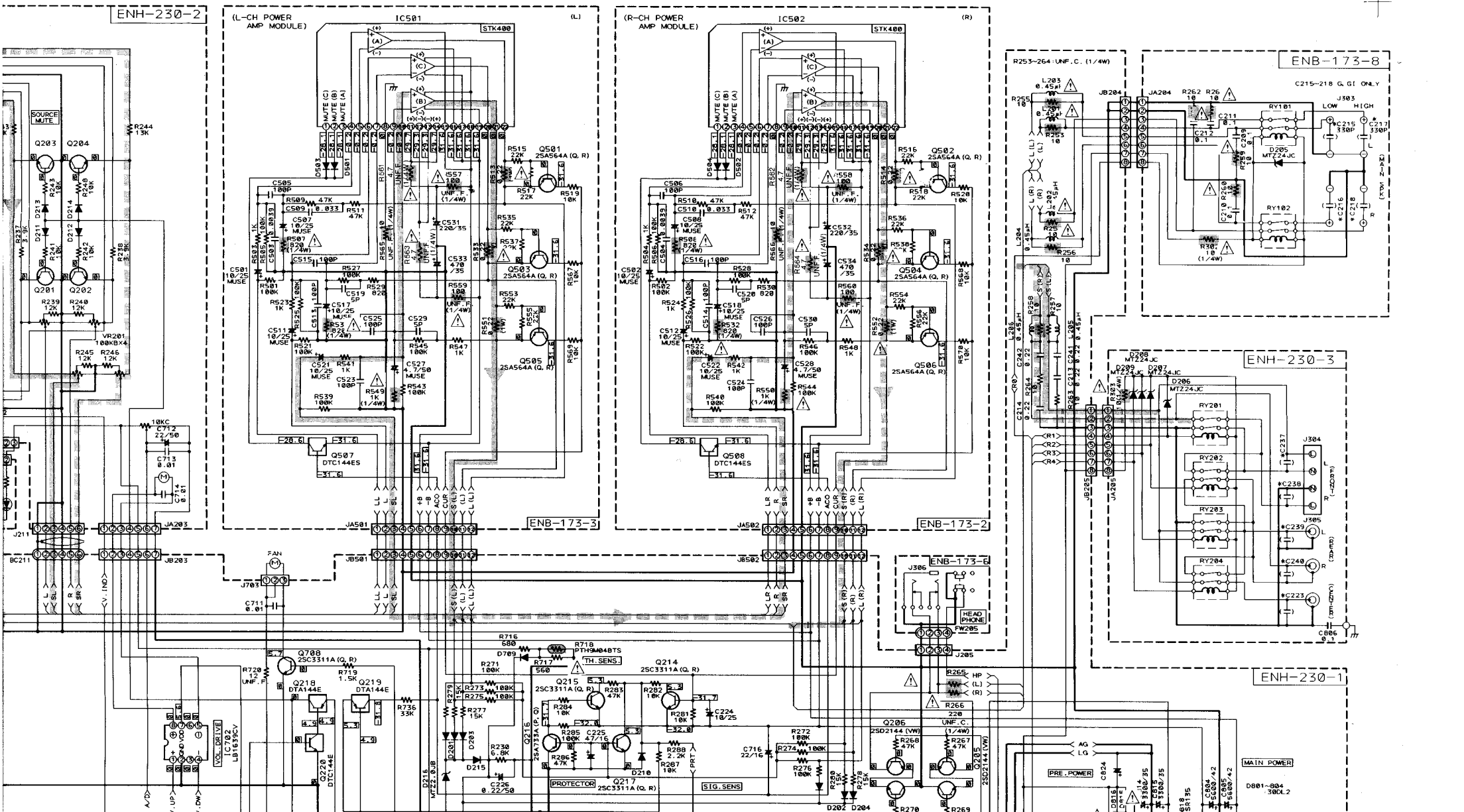


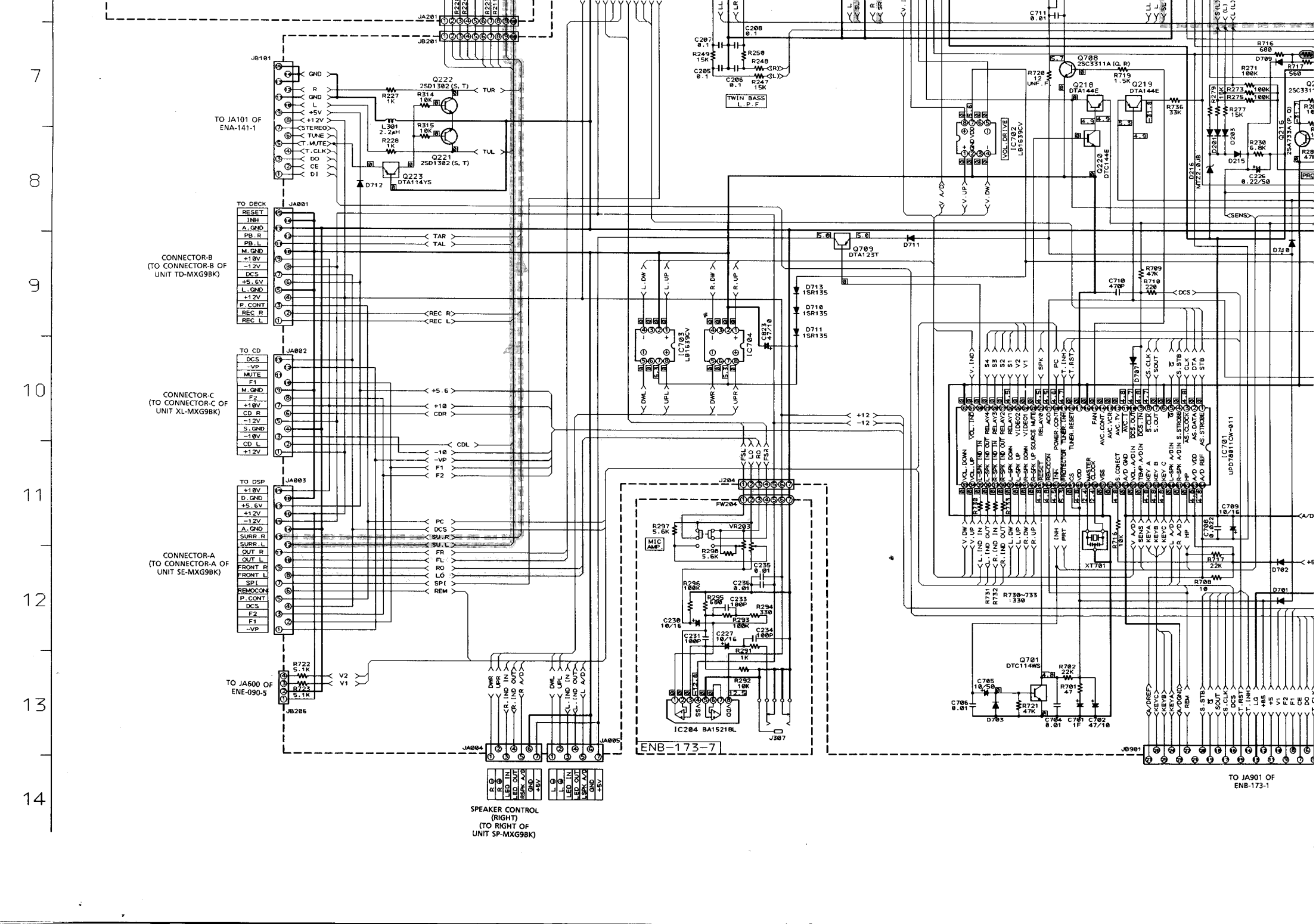

Except DOLBY PRO LOGIC/3CH LOGIC and DAP mode
Amplifier IC501, 502 STK400
Headphone mute Q205~208
J306
Main speaker
High
Low
RY101, RY102
L.P.F
Amplifier IC501, 502
Bass level VR204
Q224
Master volume VR201
Balance VR202
Source mute Q201~204
Q220 Q218
Driver IC702 LB1639CV
M
Center
Front (Panorama) R
Front (Panorama) L
Rear R
Rear L
RY201
RY202
RY203
RY204
F001
F101
F102
Q702 Q703
D801 ~ D804
D811 ~ D814
+31
-31
+AB
+B
-B
Q515 Q516
Q509,510 Q511,Q512
Q517
Q518,519 Q513,514
D817,818 Q811
D820 Q812
F1
F2
+12
+10
+5.6
-10
-12
-VP
To IC502
To IC501
Q508
Q507
Q219
Master Volume control
Protector
Observing headphone
Relay control
Analog switch
AC CONT
INH
Panorama speaker control
Q709
Amplifier IC501
Amplifier IC502
Master volume VR201
Panorama speaker Driver IC703,704
IC701 System controller UPD78011CW-011
RESET Q701
FAN control Q708
Key matrix S911~922
Source mute
T.INH, T.RESET
P.CONT
DCS
Q301
SPI signal
IC203 TC9164N
SOURCE DIRECT ON
VCR REC
TAPE REC
SOURCE DIRECT OFF
MAIN
SURROUND
Mic input
IC204 BA15218N
VR203
Key Matrix S931~945
FL901 FL display (ELU0001-139)
IC901 Tuner controller HD614089SD57
IC904 GP1U901X Sensor
LED Driver IC902,903 TC74HC595AP
Indicator
VIDEO SELECTOR
V1 V2 MONITOR
H H CD-G
L H –
H L VCR
L L VIDEO
SOURCE DIRECT OFF
IC202 VC4580L Buffer
IC201 TC9163N
AU
VD
VCR
TUNER
CD
TAPE
PH
V.REC
Tuner CB ENA-141
SPI indication signal
REAR (R)
REAR (L) or CENTER
V1, V2
IC600 LA7952
IC601 LA7952
6dB
IC611 VC4580LD PHONO EQ
TAPE REC
P.OFF
TO XL
TO TD
TO SE
VIDEO
AUX
VCR PLAY
VCR REC
PHONO
MONITOR OUT
CD-G
Only for universal and Taiwan

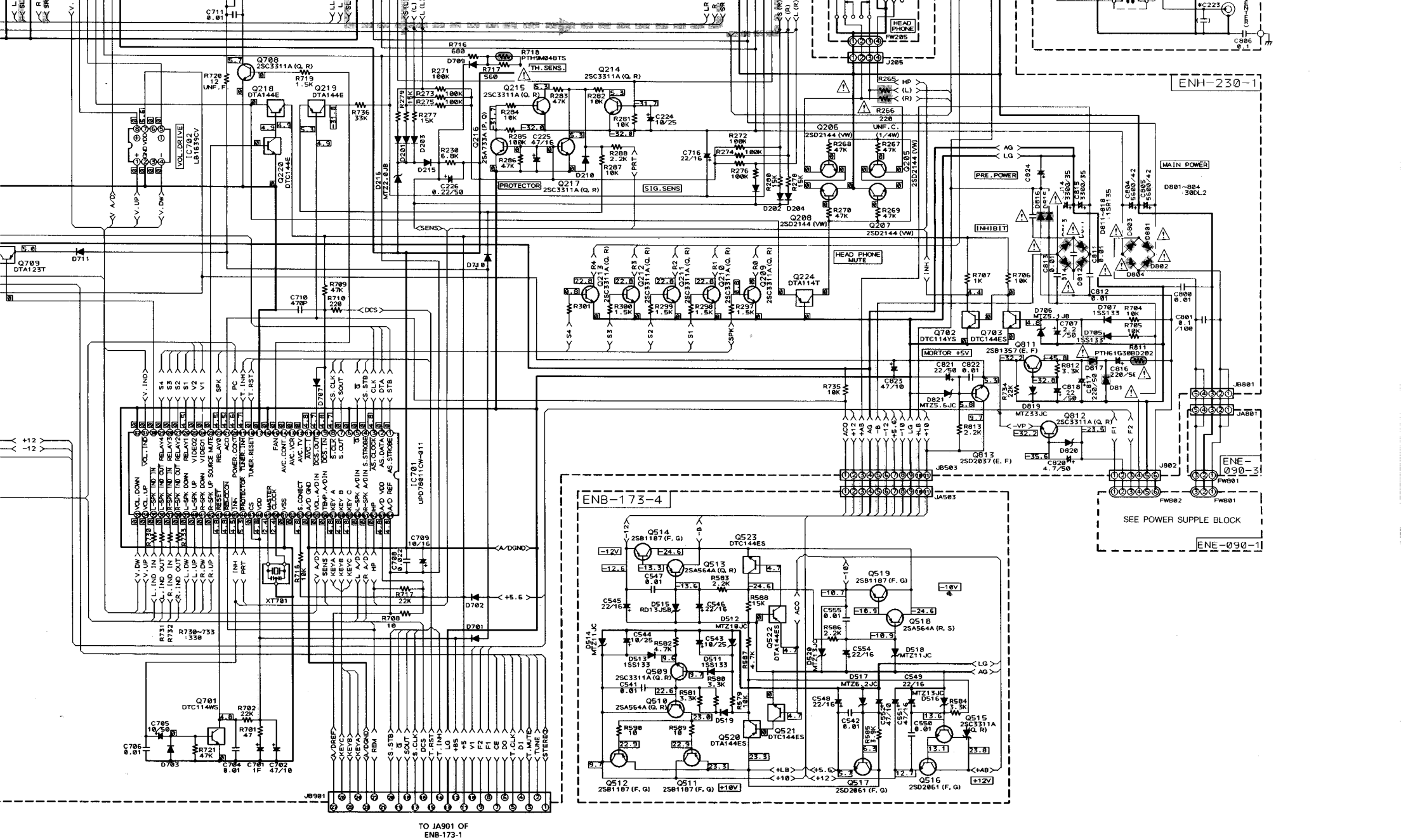
Schematic Diagrams

(1) Main, Input/Output & Power Amplifier Section



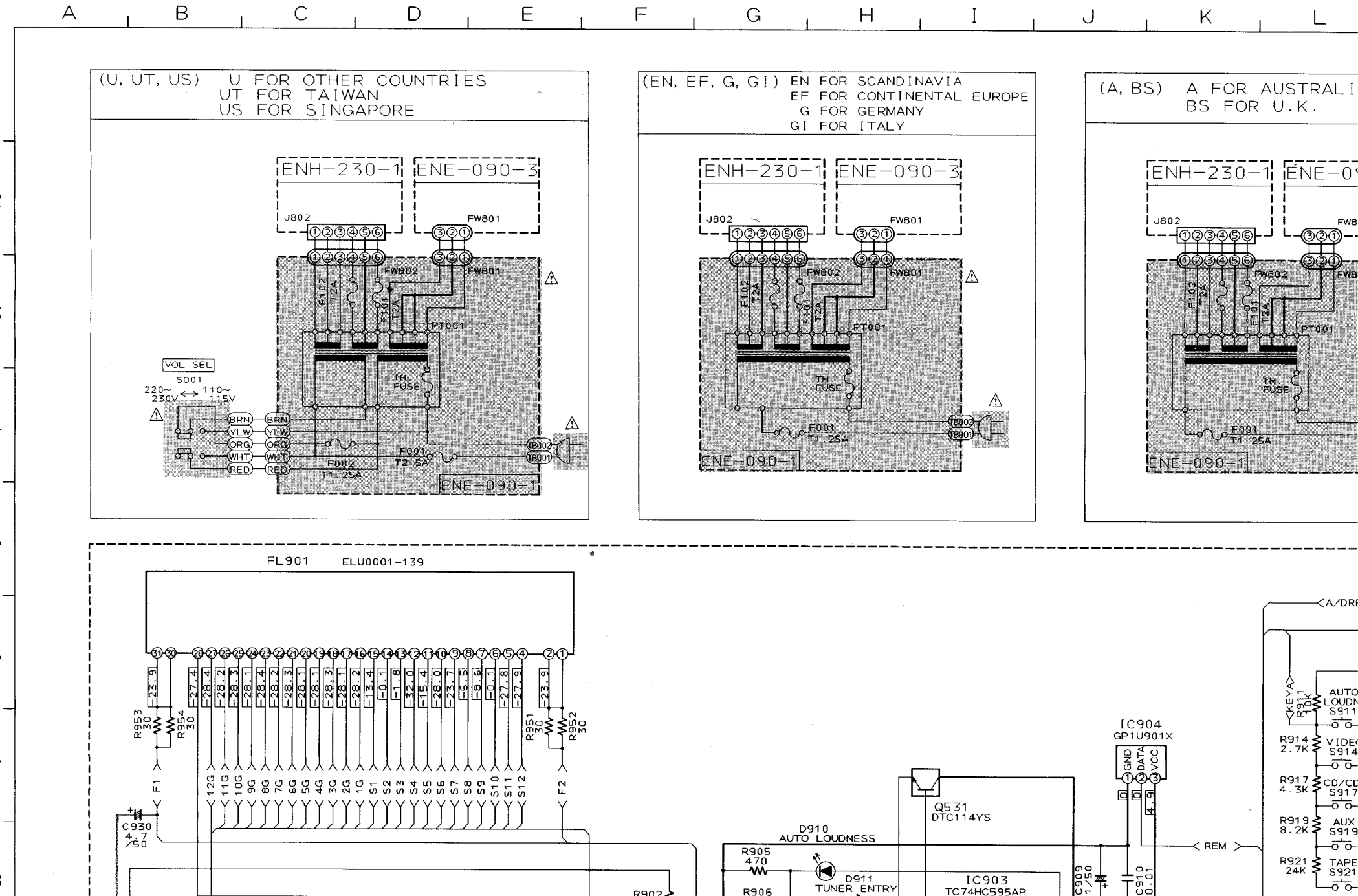

H I J K L M N O P Q R S T
ENH-230-2
(L-CH POWER AMP MODULE)
IC501
STK400
(L)
(R-CH POWER AMP MODULE)
IC502
(R)
ENB-173-3
ENB-173-2
ENB-173-8
ENH-230-3
ENH-230-1
ENB-173-6
SOURCE MUTE
Q203 Q204
Q201 Q202
VR201 100KBX4
Q501 2SA564A (Q, R)
Q502 2SA564A (Q, R)
Q503 2SA564A (Q, R)
Q504 2SA564A (Q, R)
Q505 2SA564A (Q, R)
Q506 2SA564A (Q, R)
Q507 DTC144ES
Q508 DTC144ES
JA203
JA501
JA502
JB203
JB501
JB502
J703
FAN
J211
BC211
V. IN
Q708 2SC3311A (Q, R)
Q218 DTA144E
Q219 DTA144E
Q220 DTC144E
VOL DRIVE IC702 LB1639CV
Q215 2SC3311A (Q, R)
Q214 2SC3311A (Q, R)
Q216 2SA733A (P, Q)
PROTECTOR
Q217 2SC3311A (Q, R)
TH. SENS.
SIG. SENS
Q206 2SD2144 (VW)
Q205 2SD2144 (VW)
PRE. POWER
MAIN POWER
D801~804 30DL2
HEAD PHONE
J306
J205
FW205
R253~264 : UNF. C. (1/4W)
JB204
JA204
RY101
RY102
RY201
RY202
RY203
RY204
J303
J304
J305
D205 MTZ24JC
D206 MTZ24JC
D207 MTZ24JC
D208 MTZ24JC
C215~218 G, GI ONLY
LOW HIGH
JA205
JB205


JA201
JB201
JB101
TO JA101 OF ENA-141-1
GND
R
GND
L
+5V
+12V
STEREO
TUNE
T.MUTE
T.CLK
DO
CE
DI
Q222 2SD1302(S, T)
TUR
Q221 2SD1302(S, T)
TUL
Q223 DTA114YS
D712
L301 2.2uH
R227 1K
R314 10K
R315 10K
R228 1K
TWIN BASS L.P.F
C207 0.1
C208 0.1
C205 0.1
C206 0.1
R249 15K
R250
R248 (R)
R247 15K (L)
Q708 2SC3311A(Q, R)
R719 1.5K
R720 12 UNF.F
Q218 DTA144E
Q219 DTA144E
Q220 DTC144E
VOL.DRIVE
IC702 LB1639CV
A/D
V.UP
V.DW
R716 680
D709
R717 560
R271 100K
R273 100K
R275 100K
R279 13K
R277 15K
R736 33K
D201
D203
D215
D216 MTZ2.0B
R238 5.6K
C226 0.22/50
Q216 2SA733A(P, Q)
<SENS>
TO DECK
JA001
RESET
INH
A.GND
PB.R
PB.L
M.GND
+10V
-12V
DCS
+5.6V
L.GND
+12V
P.CONT
REC R
REC L
CONNECTOR-B (TO CONNECTOR-B OF UNIT TD-MXG9BK)
TAR
TAL
REC R
REC L
Q709 DTA123T
D711
D713 1SR135
D710 1SR135
D711 1SR135
IC703 LB1639CV
IC704
C823 47/10
L.DW
L.UP
R.DW
R.UP
DWL
UPL
DWR
UPR
C710 470P
R709 47K
R710 220
<DCS>
TO CD
JA002
DCS
-VP
MUTE
F1
M.GND
F2
+10V
CD R
-12V
S.GND
-10V
CD L
+12V
CONNECTOR-C (TO CONNECTOR-C OF UNIT XL-MXG9BK)
+5.6
+10
CDR
CDL
-10
-VP
F1
F2
+12
-12
IC701 UPD78011GW-011
V.IND
S4
S3
S2
S1
V1
SPK
PC
T.INH
T.RST
S.CLK
SOUT
S.STB
CLK
DTA
STB
VOL.TRG
VOL.DOWN
VOL.UP
L-SPK IND TR
L-SPK IND OUT
RELAY4
R-SPK IND TR
R-SPK IND OUT
RELAY3
L-SPK DOWN
L-SPK UP
RELAY2
R-SPK DOWN
R-SPK UP
RELAY1
SOURCE MUTE
RELAY0
RESET
REMOCON
POWER CONT
PROTECTOR
TUNER INH
TUNER RESET
CS
VDD
MASTER CLOCK
VSS
FAN CONT
AVC CONT
AVC VOL
DCS OUT
DCS IN
S.CLOCK
S.OUT
S.STROBE
AS.DATA
AS.STROBE
AVC CONNECT
A/D GND
AVC A/D IN
TBAF A/D IN
KEY A
KEY B
KEY C
L-SPK A/D IN
R-SPK A/D IN
HP
A/D VDD
A/D REF
C709 10/16
C708 0.022
R717 22K
R708 10
D702
D701
XT701
R715 18K
R730~733 330
R731
R732
TO DSP
JA003
+10V
D.GND
+5.6V
+12V
-12V
A.GND
SURR.R
SURR.L
OUT R
OUT L
FRONT R
FRONT L
SPI
REMOCON
P.CONT
DCS
F2
F1
-VP
PC
DCS
SU.R
SU.L
FR
FL
RO
LO
SPI
REM
CONNECTOR-A (TO CONNECTOR-A OF UNIT SE-MXG9BK)
J204
FW204
VR203
MIC AMP.
R297 5.6K
R298 5.6K
C235 0.01
C236 0.01
R296 100K
R295 680
C233 100P
R294 330
R293 100K
C230 10/16
C231 100P
C227 10/16
C234 100P
R291 1K
R292 10K
IC204 BA15218L
J307
ENB-173-7
R722 5.1K
R723 5.1K
V2
V1
TO JA600 OF ENE-090-5
JB206
JA004
JA005
R.IND IN
R.IND OUT
L.IND IN
L.IND OUT
A/D
SPEAKER CONTROL (RIGHT) (TO RIGHT OF UNIT SP-MXG98K)
Q701 DTC114WS
R702 22K
R701 47
C705 10/50
C706 0.01
R721 47K
D703
C704 0.01
C701 1F
C702 47/10
JB901
TO JA901 OF ENB-173-1


ENH-230-1
ENB-173-4
ENE-090-3
ENE-090-1
SEE POWER SUPPLE BLOCK
TO JA901 OF ENB-173-1
IC701 UPD78011GW-611
IC702 LB1639CV
Q708 2SC3311A (Q, R)
Q709 DTA123T
Q710 2SC3311A (Q, R)
Q711 2SC3311A (Q, R)
Q712 2SC3311A (Q, R)
Q713 2SC3311A (Q, R)
Q714 2SC3311A (Q, R)
Q715 2SC3311A (Q, R)
Q716 2SA733A (P, Q)
Q717 2SC3311A (Q, R)
Q718 2SC3311A (Q, R)
Q719 2SC3311A (Q, R)
Q720 2SC3311A (Q, R)
Q721 2SC3311A (Q, R)
Q722 2SC3311A (Q, R)
Q723 2SC3311A (Q, R)
Q724 DTA114T
Q701 DTC114WS
Q702 DTC114YS
Q703 DTC144ES
Q811 2SB1357 (E, F)
Q812 2SC3311A (Q, R)
Q813 2SD2037 (E, F)
Q206 2SD2144 (VW)
Q207 2SD2144 (VW)
Q208 2SD2144 (VW)
Q205 2SD2144 (VW)
Q514 2SB1187 (F, G)
Q523 DTC144ES
Q513 2SA564A (Q, R)
Q519 2SB1187 (F, G)
Q518 2SA564A (R, S)
Q509 2SC3311A (Q, R)
Q510 2SA564A (Q, R)
Q522 DTA144ES
Q521 DTC144ES
Q520 DTA144ES
Q512 2SB1187 (F, G)
Q511 2SB1187 (F, G)
Q517 2SD2061 (F, G)
Q516 2SD2061 (F, G)
Q515 2SC3311A (Q, R)
D701 D702 D703 D710 D711 D712 D713 D714 D715 D716 D717 D718 D719 D720 D721 D722 D723 D724 D725 D726 D727 D728 D729 D730 D731 D732 D733 D734 D735 D736 D737 D738 D739 D740 D741 D742 D743 D744 D745 D746 D747 D748 D749 D750 D751 D752 D753 D754 D755 D756 D757 D758 D759 D760 D761 D762 D763 D764 D765 D766 D767 D768 D769 D770 D771 D772 D773 D774 D775 D776 D777 D778 D779 D780 D781 D782 D783 D784 D785 D786 D787 D788 D789 D790 D791 D792 D793 D794 D795 D796 D797 D798 D799 D800 D801 D802 D803 D804 D805 D806 D807 D808 D809 D810 D811 D812 D813 D814 D815 D816 D817 D818 D819 D820 D821
R716 680
R717 560
R718 PTH9M04BTS
TH. SENS.
R719 1.5K
R720 12 UNF. F
R721 47K
R722 22K
R723 22K
R724 10K
R725 10K
R726 10K
R727 10K
R728 10K
R729 10K
R730 330
R731 330
R732 330
R733 330
R734 22K
R735 10K
R736 33K
R737 10K
R738 10K
R739 10K
R740 10K
R741 10K
R742 10K
R743 10K
R744 10K
R745 10K
R746 10K
R747 10K
R748 10K
R749 10K
R750 10K
R751 10K
R752 10K
R753 10K
R754 10K
R755 10K
R756 10K
R757 10K
R758 10K
R759 10K
R760 10K
R761 10K
R762 10K
R763 10K
R764 10K
R765 10K
R766 10K
R767 10K
R768 10K
R769 10K
R770 10K
R771 10K
R772 10K
R773 10K
R774 10K
R775 10K
R776 10K
R777 10K
R778 10K
R779 10K
R780 10K
R781 10K
R782 10K
R783 10K
R784 10K
R785 10K
R786 10K
R787 10K
R788 10K
R789 10K
R790 10K
R791 10K
R792 10K
R793 10K
R794 10K
R795 10K
R796 10K
R797 10K
R798 10K
R799 10K
R800 10K
R801 10K
R802 10K
R803 10K
R804 10K
R805 10K
R806 10K
R807 10K
R808 10K
R809 10K
R810 10K
R811 10K
R812 10K
R813 10K
R814 10K
R815 10K
R816 10K
R817 10K
R818 10K
R819 10K
R820 10K
R821 10K
R822 10K
R823 10K
R824 10K
R825 10K
R826 10K
R827 10K
R828 10K
R829 10K
R830 10K
R831 10K
R832 10K
R833 10K
R834 10K
R835 10K
R836 10K
R837 10K
R838 10K
R839 10K
R840 10K
R841 10K
R842 10K
R843 10K
R844 10K
R845 10K
R846 10K
R847 10K
R848 10K
R849 10K
R850 10K
R851 10K
R852 10K
R853 10K
R854 10K
R855 10K
R856 10K
R857 10K
R858 10K
R859 10K
R860 10K
R861 10K
R862 10K
R863 10K
R864 10K
R865 10K
R866 10K
R867 10K
R868 10K
R869 10K
R870 10K
R871 10K
R872 10K
R873 10K
R874 10K
R875 10K
R876 10K
R877 10K
R878 10K
R879 10K
R880 10K
R881 10K
R882 10K
R883 10K
R884 10K
R885 10K
R886 10K
R887 10K
R888 10K
R889 10K
R890 10K
R891 10K
R892 10K
R893 10K
R894 10K
R895 10K
R896 10K
R897 10K
R898 10K
R899 10K
R900 10K
R901 10K
R902 10K
R903 10K
R904 10K
R905 10K
R906 10K
R907 10K
R908 10K
R909 10K
R910 10K
R911 10K
R912 10K
R913 10K
R914 10K
R915 10K
R916 10K
R917 10K
R918 10K
R919 10K
R920 10K
R921 10K
R922 10K
R923 10K
R924 10K
R925 10K
R926 10K
R927 10K
R928 10K
R929 10K
R930 10K
R931 10K
R932 10K
R933 10K
R934 10K
R935 10K
R936 10K
R937 10K
R938 10K
R939 10K
R940 10K
R941 10K
R942 10K
R943 10K
R944 10K
R945 10K
R946 10K
R947 10K
R948 10K
R949 10K
R950 10K
R951 10K
R952 10K
R953 10K
R954 10K
R955 10K
R956 10K
R957 10K
R958 10K
R959 10K
R960 10K
R961 10K
R962 10K
R963 10K
R964 10K
R965 10K
R966 10K
R967 10K
R968 10K
R969 10K
R970 10K
R971 10K
R972 10K
R973 10K
R974 10K
R975 10K
R976 10K
R977 10K
R978 10K
R979 10K
R980 10K
R981 10K
R982 10K
R983 10K
R984 10K
R985 10K
R986 10K
R987 10K
R988 10K
R989 10K
R990 10K
R991 10K
R992 10K
R993 10K
R994 10K
R995 10K
R996 10K
R997 10K
R998 10K
R999 10K
R1000 10K
C701 C702 C703 C704 C705 C706 C707 C708 C709 C710 C711 C712 C713 C714 C715 C716 C717 C718 C719 C720 C721 C722 C723 C724 C725 C726 C727 C728 C729 C730 C731 C732 C733 C734 C735 C736 C737 C738 C739 C740 C741 C742 C743 C744 C745 C746 C747 C748 C749 C750 C751 C752 C753 C754 C755 C756 C757 C758 C759 C760 C761 C762 C763 C764 C765 C766 C767 C768 C769 C770 C771 C772 C773 C774 C775 C776 C777 C778 C779 C780 C781 C782 C783 C784 C785 C786 C787 C788 C789 C790 C791 C792 C793 C794 C795 C796 C797 C798 C799 C800 C801 C802 C803 C804 C805 C806 C807 C808 C809 C810 C811 C812 C813 C814 C815 C816 C817 C818 C819 C820 C821 C822 C823 C824 C825 C826 C827 C828 C829 C830 C831 C832 C833 C834 C835 C836 C837 C838 C839 C840 C841 C842 C843 C844 C845 C846 C847 C848 C849 C850 C851 C852 C853 C854 C855 C856 C857 C858 C859 C860 C861 C862 C863 C864 C865 C866 C867 C868 C869 C870 C871 C872 C873 C874 C875 C876 C877 C878 C879 C880 C881 C882 C883 C884 C885 C886 C887 C888 C889 C890 C891 C892 C893 C894 C895 C896 C897 C898 C899 C900 C901 C902 C903 C904 C905 C906 C907 C908 C909 C910 C911 C912 C913 C914 C915 C916 C917 C918 C919 C920 C921 C922 C923 C924 C925 C926 C927 C928 C929 C930 C931 C932 C933 C934 C935 C936 C937 C938 C939 C940 C941 C942 C943 C944 C945 C946 C947 C948 C949 C950 C951 C952 C953 C954 C955 C956 C957 C958 C959 C960 C961 C962 C963 C964 C965 C966 C967 C968 C969 C970 C971 C972 C973 C974 C975 C976 C977 C978 C979 C980 C981 C982 C983 C984 C985 C986 C987 C988 C989 C990 C991 C992 C993 C994 C995 C996 C997 C998 C999 C1000
J205 J206 J207 J208 J209 J210 J211 J212 J213 J214 J215 J216 J217 J218 J219 J220 J221 J222 J223 J224 J225 J226 J227 J228 J229 J230 J231 J232 J233 J234 J235 J236 J237 J238 J239 J240 J241 J242 J243 J244 J245 J246 J247 J248 J249 J250 J251 J252 J253 J254 J255 J256 J257 J258 J259 J260 J261 J262 J263 J264 J265 J266 J267 J268 J269 J270 J271 J272 J273 J274 J275 J276 J277 J278 J279 J280 J281 J282 J283 J284 J285 J286 J287 J288 J289 J290 J291 J292 J293 J294 J295 J296 J297 J298 J299 J300 J301 J302 J303 J304 J305 J306 J307 J308 J309 J310 J311 J312 J313 J314 J315 J316 J317 J318 J319 J320 J321 J322 J323 J324 J325 J326 J327 J328 J329 J330 J331 J332 J333 J334 J335 J336 J337 J338 J339 J340 J341 J342 J343 J344 J345 J346 J347 J348 J349 J350 J351 J352 J353 J354 J355 J356 J357 J358 J359 J360 J361 J362 J363 J364 J365 J366 J367 J368 J369 J370 J371 J372 J373 J374 J375 J376 J377 J378 J379 J380 J381 J382 J383 J384 J385 J386 J387 J388 J389 J390 J391 J392 J393 J394 J395 J396 J397 J398 J399 J400 J401 J402 J403 J404 J405 J406 J407 J408 J409 J410 J411 J412 J413 J414 J415 J416 J417 J418 J419 J420 J421 J422 J423 J424 J425 J426 J427 J428 J429 J430 J431 J432 J433 J434 J435 J436 J437 J438 J439 J440 J441 J442 J443 J444 J445 J446 J447 J448 J449 J450 J451 J452 J453 J454 J455 J456 J457 J458 J459 J460 J461 J462 J463 J464 J465 J466 J467 J468 J469 J470 J471 J472 J473 J474 J475 J476 J477 J478 J479 J480 J481 J482 J483 J484 J485 J486 J487 J488 J489 J490 J491 J492 J493 J494 J495 J496 J497 J498 J499 J500 J501 J502 J503 J504 J505 J506 J507 J508 J509 J510 J511 J512 J513 J514 J515 J516 J517 J518 J519 J520 J521 J522 J523 J524 J525 J526 J527 J528 J529 J530 J531 J532 J533 J534 J535 J536 J537 J538 J539 J540 J541 J542 J543 J544 J545 J546 J547 J548 J549 J550 J551 J552 J553 J554 J555 J556 J557 J558 J559 J560 J561 J562 J563 J564 J565 J566 J567 J568 J569 J570 J571 J572 J573 J574 J575 J576 J577 J578 J579 J580 J581 J582 J583 J584 J585 J586 J587 J588 J589 J590 J591 J592 J593 J594 J595 J596 J597 J598 J599 J600 J601 J602 J603 J604 J605 J606 J607 J608 J609 J610 J611 J612 J613 J614 J615 J616 J617 J618 J619 J620 J621 J622 J623 J624 J625 J626 J627 J628 J629 J630 J631 J632 J633 J634 J635 J636 J637 J638 J639 J640 J641 J642 J643 J644 J645 J646 J647 J648 J649 J650 J651 J652 J653 J654 J655 J656 J657 J658 J659 J660 J661 J662 J663 J664 J665 J666 J667 J668 J669 J670 J671 J672 J673 J674 J675 J676 J677 J678 J679 J680 J681 J682 J683 J684 J685 J686 J687 J688 J689 J690 J691 J692 J693 J694 J695 J696 J697 J698 J699 J700 J701 J702 J703 J704 J705 J706 J707 J708 J709 J710 J711 J712 J713 J714 J715 J716 J717 J718 J719 J720 J721 J722 J723 J724 J725 J726 J727 J728 J729 J730 J731 J732 J733 J734 J735 J736 J737 J738 J739 J740 J741 J742 J743 J744 J745 J746 J747 J748 J749 J750 J751 J752 J753 J754 J755 J756 J757 J758 J759 J760 J761 J762 J763 J764 J765 J766 J767 J768 J769 J770 J771 J772 J773 J774 J775 J776 J777 J778 J779 J780 J781 J782 J783 J784 J785 J786 J787 J788 J789 J790 J791 J792 J793 J794 J795 J796 J797 J798 J799 J800 J801 J802 J803 J804 J805 J806 J807 J808 J809 J810 J811 J812 J813 J814 J815 J816 J817 J818 J819 J820 J821 J822 J823 J824 J825 J826 J827 J828 J829 J830 J831 J832 J833 J834 J835 J836 J837 J838 J839 J840 J841 J842 J843 J844 J845 J846 J847 J848 J849 J850 J851 J852 J853 J854 J855 J856 J857 J858 J859 J860 J861 J862 J863 J864 J865 J866 J867 J868 J869 J870 J871 J872 J873 J874 J875 J876 J877 J878 J879 J880 J881 J882 J883 J884 J885 J886 J887 J888 J889 J890 J891 J892 J893 J894 J895 J896 J897 J898 J899 J900 J901 J902 J903 J904 J905 J906 J907 J908 J909 J910 J911 J912 J913 J914 J915 J916 J917 J918 J919 J920 J921 J922 J923 J924 J925 J926 J927 J928 J929 J930 J931 J932 J933 J934 J935 J936 J937 J938 J939 J940 J941 J942 J943 J944 J945 J946 J947 J948 J949 J950 J951 J952 J953 J954 J955 J956 J957 J958 J959 J960 J961 J962 J963 J964 J965 J966 J967 J968 J969 J970 J971 J972 J973 J974 J975 J976 J977 J978 J979 J980 J981 J982 J983 J984 J985 J986 J987 J988 J989 J990 J991 J992 J993 J994 J995 J996 J997 J998 J999 J1000
JA503 JB503 JB801 JA801 J802 FW901 FW902
JB901
XT701
D201 D202 D203 D204 D205 D206 D207 D208 D209 D210 D211 D212 D213 D214 D215 D216 D217 D218 D219 D220 D221 D222 D223 D224 D225 D226 D227 D228 D229 D230 D231 D232 D233 D234 D235 D236 D237 D238 D239 D240 D241 D242 D243 D244 D245 D246 D247 D248 D249 D250 D251 D252 D253 D254 D255 D256 D257 D258 D259 D260 D261 D262 D263 D264 D265 D266 D267 D268 D269 D270 D271 D272 D273 D274 D275 D276 D277 D278 D279 D280 D281 D282 D283 D284 D285 D286 D287 D288 D289 D290 D291 D292 D293 D294 D295 D296 D297 D298 D299 D300 D301 D302 D303 D304 D305 D306 D307 D308 D309 D310 D311 D312 D313 D314 D315 D316 D317 D318 D319 D320 D321 D322 D323 D324 D325 D326 D327 D328 D329 D330 D331 D332 D333 D334 D335 D336 D337 D338 D339 D340 D341 D342 D343 D344 D345 D346 D347 D348 D349 D350 D351 D352 D353 D354 D355 D356 D357 D358 D359 D360 D361 D362 D363 D364 D365 D366 D367 D368 D369 D370 D371 D372 D373 D374 D375 D376 D377 D378 D379 D380 D381 D382 D383 D384 D385 D386 D387 D388 D389 D390 D391 D392 D393 D394 D395 D396 D397 D398 D399 D400 D401 D402 D403 D404 D405 D406 D407 D408 D409 D410 D411 D412 D413 D414 D415 D416 D417 D418 D419 D420 D421 D422 D423 D424 D425 D426 D427 D428 D429 D430 D431 D432 D433 D434 D435 D436 D437 D438 D439 D440 D441 D442 D443 D444 D445 D446 D447 D448 D449 D450 D451 D452 D453 D454 D455 D456 D457 D458 D459 D460 D461 D462 D463 D464 D465 D466 D467 D468 D469 D470 D471 D472 D473 D474 D475 D476 D477 D478 D479 D480 D481 D482 D483 D484 D485 D486 D487 D488 D489 D490 D491 D492 D493 D494 D495 D496 D497 D498 D499 D500 D501 D502 D503 D504 D505 D506 D507 D508 D509 D510 D511 D512 D513 D514 D515 D516 D517 D518 D519 D520 D521 D522 D523 D524 D525 D526 D527 D528 D529 D530 D531 D532 D533 D534 D535 D536 D537 D538 D539 D540 D541 D542 D543 D544 D545 D546 D547 D548 D549 D550 D551 D552 D553 D554 D555 D556 D557 D558 D559 D560 D561 D562 D563 D564 D565 D566 D567 D568 D569 D570 D571 D572 D573 D574 D575 D576 D577 D578 D579 D580 D581 D582 D583 D584 D585 D586 D587 D588 D589 D590 D591 D592 D593 D594 D595 D596 D597 D598 D599 D600 D601 D602 D603 D604 D605 D606 D607 D608 D609 D610 D611 D612 D613 D614 D615 D616 D617 D618 D619 D620 D621 D622 D623 D624 D625 D626 D627 D628 D629 D630 D631 D632 D633 D634 D635 D636 D637 D638 D639 D640 D641 D642 D643 D644 D645 D646 D647 D648 D649 D650 D651 D652 D653 D654 D655 D656 D657 D658 D659 D660 D661 D662 D663 D664 D665 D666 D667 D668 D669 D670 D671 D672 D673 D674 D675 D676 D677 D678 D679 D680 D681 D682 D683 D684 D685 D686 D687 D688 D689 D690 D691 D692 D693 D694 D695 D696 D697 D698 D699 D700 D701 D702 D703 D704 D705 D706 D707 D708 D709 D710 D711 D712 D713 D714 D715 D716 D717 D718 D719 D720 D721 D722 D723 D724 D725 D726 D727 D728 D729 D730 D731 D732 D733 D734 D735 D736 D737 D738 D739 D740 D741 D742 D743 D744 D745 D746 D747 D748 D749 D750 D751 D752 D753 D754 D755 D756 D757 D758 D759 D760 D761 D762 D763 D764 D765 D766 D767 D768 D769 D770 D771 D772 D773 D774 D775 D776 D777 D778 D779 D780 D781 D782 D783 D784 D785 D786 D787 D788 D789 D790 D791 D792 D793 D794 D795 D796 D797 D798 D799 D800 D801 D802 D803 D804 D805 D806 D807 D808 D809 D810 D811 D812 D813 D814 D815 D816 D817 D818 D819 D820 D821
R716 680
R717 560
R718 PTH9M04BTS
TH. SENS.
R719 1.5K
R720 12 UNF. F
R721 47K
R722 22K
R723 22K
R724 10K
R725 10K
R726 10K
R727 10K
R728 10K
R729 10K
R730 330
R731 330
R732 330
R733 330
R734 22K
R735 10K
R736 33K
R737 10K
R738 10K
R739 10K
R740 10K
R741 10K
R742 10K
R743 10K
R744 10K
R745 10K
R746 10K
R747 10K
R748 10K
R749 10K
R750 10K
R751 10K
R752 10K
R753 10K
R754 10K
R755 10K
R756 10K
R757 10K
R758 10K
R759 10K
R760 10K
R761 10K
R762 10K
R763 10K
R764 10K
R765 10K
R766 10K
R767 10K
R768 10K
R769 10K
R770 10K
R771 10K
R772 10K
R773 10K
R774 10K
R775 10K
R776 10K
R777 10K
R778 10K
R779 10K
R780 10K
R781 10K
R782 10K
R783 10K
R784 10K
R785 10K
R786 10K
R787 10K
R788 10K
R789 10K
R790 10K
R791 10K
R792 10K
R793 10K
R794 10K
R795 10K
R796 10K
R797 10K
R798 10K
R799 10K
R800 10K
R801 10K
R802 10K
R803 10K
R804 10K
R805 10K
R806 10K
R807 10K
R808 10K
R809 10K
R810 10K
R811 10K
R812 10K
R813 10K
R814 10K
R815 10K
R816 10K
R817 10K
R818 10K
R819 10K
R820 10K
R821 10K
R822 10K
R823 10K
R824 10K
R825 10K
R826 10K
R827 10K
R828 10K
R829 10K
R830 10K
R831 10K
R832 10K
R833 10K
R834 10K
R835 10K
R836 10K
R837 10K
R838 10K
R839 10K
R840 10K
R841 10K
R842 10K
R843 10K
R844 10K
R845 10K
R846 10K
R847 10K
R848 10K
R849 10K
R850 10K
R851 10K
R852 10K
R853 10K
R854 10K
R855 10K
R856 10K
R857 10K
R858 10K
R859 10K
R860 10K
R861 10K
R862 10K
R863 10K
R864 10K
R865 10K
R866 10K
R867 10K
R868 10K
R869 10K
R870 10K
R871 10K
R872 10K
R873 10K
R874 10K
R875 10K
R876 10K
R877 10K
R878 10K
R879 10K
R880 10K
R881 10K
R882 10K
R883 10K
R884 10K
R885 10K
R886 10K
R887 10K
R888 10K
R889 10K
R890 10K
R891 10K
R892 10K
R893 10K
R894 10K
R895 10K
R896 10K
R897 10K
R898 10K
R899 10K
R900 10K
R901 10K
R902 10K
R903 10K
R904 10K
R905 10K
R906 10K
R907 10K
R908 10K
R909 10K
R910 10K
R911 10K
R912 10K
R913 10K
R914 10K
R915 10K
R916 10K
R917 10K
R918 10K
R919 10K
R920 10K
R921 10K
R922 10K
R923 10K
R924 10K
R925 10K
R926 10K
R927 10K
R928 10K
R929 10K
R930 10K
R931 10K
R932 10K
R933 10K
R934 10K
R935 10K
R936 10K
R937 10K
R938 10K
R939 10K
R940 10K
R941 10K
R942 10K
R943 10K
R944 10K
R945 10K
R946 10K
R947 10K
R948 10K
R949 10K
R950 10K
R951 10K
R952 10K
R953 10K
R954 10K
R955 10K
R956 10K
R957 10K
R958 10K
R959 10K
R960 10K
R961 10K
R962 10K
R963 10K
R964 10K
R965 10K
R966 10K
R967 10K
R968 10K
R969 10K
R970 10K
R971 10K
R972 10K
R973 10K
R974 10K
R975 10K
R976 10K
R977 10K
R978 10K
R979 10K
R980 10K
R981 10K
R982 10K
R983 10K
R984 10K
R985 10K
R986 10K
R987 10K
R988 10K
R989 10K
R990 10K
R991 10K
R992 10K
R993 10K
R994 10K
R995 10K
R996 10K
R997 10K
R998 10K
R999 10K
R1000 10K
C701 C702 C703 C704 C705 C706 C707 C708 C709 C710 C711 C712 C713 C714 C715 C716 C717 C718 C719 C720 C721 C722 C723 C724 C725 C726 C727 C728 C729 C730 C731 C732 C733 C734 C735 C736 C737 C738 C739 C740 C741 C742 C743 C744 C745 C746 C747 C748 C749 C750 C751 C752 C753 C754 C755 C756 C757 C758 C759 C760 C761 C762 C763 C764 C765 C766 C767 C768 C769 C770 C771 C772 C773 C774 C775 C776 C777 C778 C779 C780 C781 C782 C783 C784 C785 C786 C787 C788 C789 C790 C791 C792 C793 C794 C795 C796 C797 C798 C799 C800 C801 C802 C803 C804 C805 C806 C807 C808 C809 C810 C811 C812 C813 C814 C815 C816 C817 C818 C819 C820 C821 C822 C823 C824 C825 C826 C827 C828 C829 C830 C831 C832 C833 C834 C835 C836 C837 C838 C839 C840 C841 C842 C843 C844 C845 C846 C847 C848 C849 C850 C851 C852 C853 C854 C855 C856 C857 C858 C859 C860 C861 C862 C863 C864 C865 C866 C867 C868 C869 C870 C871 C872 C873 C874 C875 C876 C877 C878 C879 C880 C881 C882 C883 C884 C885 C886 C887 C888 C889 C890 C891 C892 C893 C894 C895 C896 C897 C898 C899 C900 C901 C902 C903 C904 C905 C906 C907 C908 C909 C910 C911 C912 C913 C914 C915 C916 C917 C918 C919 C920 C921 C922 C923 C924 C925 C926 C927 C928 C929 C930 C931 C932 C933 C934 C935 C936 C937 C938 C939 C940 C941 C942 C943 C944 C945 C946 C947 C948 C949 C950 C951 C952 C953 C954 C955 C956 C957 C958 C959 C960 C961 C962 C963 C964 C965 C966 C967 C968 C969 C970 C971 C972 C973 C974 C975 C976 C977 C978 C979 C980 C981 C982 C983 C984 C985 C986 C987 C988 C989 C990 C991 C992 C993 C994 C995 C996 C997 C998 C999 C1000
J205 J206 J207 J208 J209 J210 J211 J212 J213 J214 J215 J216 J217 J218 J219 J220 J221 J222 J223 J224 J225 J226 J227 J228 J229 J230 J231 J232 J233 J234 J235 J236 J237 J238 J239 J240 J241 J242 J243 J244 J245 J246 J247 J248 J249 J250 J251 J252 J253 J254 J255 J256 J257 J258 J259 J260 J261 J262 J263 J264 J265 J266 J267 J268 J269 J270 J271 J272 J273 J274 J275 J276 J277 J278 J279 J280 J281 J282 J283 J284 J285 J286 J287 J288 J289 J290 J291 J292 J293 J294 J295 J296 J297 J298 J299 J300 J301 J302 J303 J304 J305 J306 J307 J308 J309 J310 J311 J312 J313 J314 J315 J316 J317 J318 J319 J320 J321 J322 J323 J324 J325 J326 J327 J328 J329 J330 J331 J332 J333 J334 J335 J336 J337 J338 J339 J340 J341 J342 J343 J344 J345 J346 J347 J348 J349 J350 J351 J352 J353 J354 J355 J356 J357 J358 J359 J360 J361 J362 J363 J364 J365 J366 J367 J368 J369 J370 J371 J372 J373 J374 J375 J376 J377 J378 J379 J380 J381 J382 J383 J384 J385 J386 J387 J388 J389 J390 J391 J392 J393 J394 J395 J396 J397 J398 J399 J400 J401 J402 J403 J404 J405 J406 J407 J408 J409 J410 J411 J412 J413 J414 J415 J416 J417 J418 J419 J420 J421 J422 J423 J424 J425 J426 J427 J428 J429 J430 J431 J432 J433 J434 J435 J436 J437 J438 J439 J440 J441 J442 J443 J444 J445 J446 J447 J448 J449 J450 J451 J452 J453 J454 J455 J456 J457 J458 J459 J460 J461 J462 J463 J464 J465 J466 J467 J468 J469 J470 J471 J472 J473 J474 J475 J476 J477 J478 J479 J480 J481 J482 J483 J484 J485 J486 J487 J488 J489 J490 J491 J492 J493 J494 J495 J496 J497 J498 J499 J500 J501 J502 J503 J504 J505 J506 J507 J508 J509 J510 J511 J512 J513 J514 J515 J516 J517 J518 J519 J520 J521 J522 J523 J524 J525 J526 J527 J528 J529 J530 J531 J532 J533 J534 J535 J536 J537 J538 J539 J540 J541 J542 J543 J544 J545 J546 J547 J548 J549 J550 J551 J552 J553 J554 J555 J556 J557 J558 J559 J560 J561 J562 J563 J564 J565 J566 J567 J568 J569 J570 J571 J572 J573 J574 J575 J576 J577 J578 J579 J580 J581 J582 J583 J584 J585 J586 J587 J588 J589 J590 J591 J592 J593 J594 J595 J596 J597 J598 J599 J600 J601 J602 J603 J604 J605 J606 J607 J608 J609 J610 J611 J612 J613 J614 J615 J616 J617 J618 J619 J620 J621 J622 J623 J624 J625 J626 J627 J628 J629 J630 J631 J632 J633 J634 J635 J636 J637 J638 J639 J640 J641 J642 J643 J644 J645 J646 J647 J648 J649 J650 J651 J652 J653 J654 J655 J656 J657 J658 J659 J660 J661 J662 J663 J664 J665 J666 J667 J668 J669 J670 J671 J672 J673 J674 J675 J676 J677 J678 J679 J680 J681 J682 J683 J684 J685 J686 J687 J688 J689 J690 J691 J692 J693 J694 J695 J696 J697 J698 J699 J700 J701 J702 J703 J704 J705 J706 J707 J708 J709 J710 J711 J712 J713 J714 J715 J716 J717 J718 J719 J720 J721 J722 J723 J724 J725 J726 J727 J728 J729 J730 J731 J732 J733 J734 J735 J736 J737 J738 J739 J740 J741 J742 J743 J744 J745 J746 J747 J748 J749 J750 J751 J752 J753 J754 J755 J756 J757 J758 J759 J760 J761 J762 J763 J764 J765 J766 J767 J768 J769 J770 J771 J772 J773 J774 J775 J776 J777 J778 J779 J780 J781 J782 J783 J784 J785 J786 J787 J788 J789 J790 J791 J792 J793 J794 J795 J796 J797 J798 J799 J800 J801 J802 J803 J804 J805 J806 J807 J808 J809 J810 J811 J812 J813 J814 J815 J816 J817 J818 J819 J820 J821 J822 J823 J824 J825 J826 J827 J828 J829 J830 J831 J832 J833 J834 J835 J836 J837 J838 J839 J840 J841 J842 J843 J844 J845 J846 J847 J848 J849 J850 J851 J852 J853 J854 J855 J856 J857 J858 J859 J860 J861 J862 J863 J864 J865 J866 J867 J868 J869 J870 J871 J872 J873 J874 J875 J876 J877 J878 J879 J880 J881 J882 J883 J884 J885 J886 J887 J888 J889 J890 J891 J892 J893 J894 J895 J896 J897 J898 J899 J900 J901 J902 J903 J904 J905 J906 J907 J908 J909 J910 J911 J912 J913 J914 J915 J916 J917 J918 J919 J920 J921 J922 J923 J924 J925 J926 J927 J928 J929 J930 J931 J932 J933 J934 J935 J936 J937 J938 J939 J940 J941 J942 J943 J944 J945 J946 J947 J948 J949 J950 J951 J952 J953 J954 J955 J956 J957 J958 J959 J960 J961 J962 J963 J964 J965 J966 J967 J968 J969 J970 J971 J972 J973 J974 J975 J976 J977 J978 J979 J980 J981 J982 J983 J984 J985 J986 J987 J988 J989 J990 J991 J992 J993 J994 J995 J996 J997 J998 J999 J1000
JA503 JB503 JB801 JA801 J802 FW901 FW902
JB901
XT701
D201 D202 D203 D204 D205 D206 D207 D208 D209 D210 D211 D212 D213 D214 D215 D216 D217 D218 D219 D220 D221 D222 D223 D224 D225 D226 D227 D228 D229 D230 D231 D232 D233 D234 D235 D236 D237 D238 D239 D240 D241 D242 D243 D244 D245 D246 D247 D248 D249 D250 D251 D252 D253 D254 D255 D256 D257 D258 D259 D260 D261 D262 D263 D264 D265 D266 D267 D268 D269 D270 D271 D272 D273 D274 D275 D276 D277 D278 D279 D280 D281 D282 D283 D284 D285 D286 D287 D288 D289 D290 D291 D292 D293 D294 D295 D296 D297 D298 D299 D300 D301 D302 D303 D304 D305 D306 D307 D308 D309 D310 D311 D312 D313 D314 D315 D316 D317 D318 D319 D320 D321 D322 D323 D324 D325 D326 D327 D328 D329 D330 D331 D332 D333 D334 D335 D336 D337 D338 D339 D340 D341 D342 D343 D344 D345 D346 D347 D348 D349 D350 D351 D352 D353 D354 D355 D356 D357 D358 D359 D360 D361 D362 D363 D364 D365 D366 D367 D368 D369 D370 D371 D372 D373 D374 D375 D376 D377 D378 D379 D380 D381 D382 D383 D384 D385 D386 D387 D388 D389 D390 D391 D392 D393 D394 D395 D396 D397 D398 D399 D400 D401 D402 D403 D404 D405 D406 D407 D408 D409 D410 D411 D412 D413 D414 D415 D416 D417 D418 D419 D420 D421 D422 D423 D424 D425 D426 D427 D428 D429 D430 D431 D432 D433 D434 D435 D436 D437 D438 D439 D440 D441 D442 D443 D444 D445 D446 D447 D448 D449 D450 D451 D452 D453 D454 D455 D456 D457 D458 D459 D460 D461 D462 D463 D464 D465 D466 D467 D468 D469 D470 D471 D472 D473 D474 D475 D476 D477 D478 D479 D480 D481 D482 D483 D484 D485 D486 D487 D488 D489 D490 D491 D492 D493 D494 D495 D496 D497 D498 D499 D500 D501 D502 D503 D504 D505 D506 D507 D508 D509 D510 D511 D512 D513 D514 D515 D516 D517 D518 D519 D520 D521 D522 D523 D524 D525 D526 D527 D528 D529 D530 D531 D532 D533 D534 D535 D536 D537 D538 D539 D540 D541 D542 D543 D544 D545 D546 D547 D548 D549 D550 D551 D552 D553 D554 D555 D556 D557 D558 D559 D560 D561 D562 D563 D564 D565 D566 D567 D568 D569 D570 D571 D572 D573 D574 D575 D576 D577 D578 D579 D580 D581 D582 D583 D584 D585 D586 D587 D588 D589 D590 D591 D592 D593 D594 D595 D596 D597 D598 D599 D600 D601 D602 D603 D604 D605 D606 D607 D608 D609 D610 D611 D612 D613 D614 D615 D616 D617 D618 D619 D620 D621 D622 D623 D624 D625 D626 D627 D628 D629 D630 D631 D632 D633 D634 D635 D636 D637 D638 D639 D640 D641 D642 D643 D644 D645 D646 D647 D648 D649 D650 D651 D652 D653 D654 D655 D656 D657 D658 D659 D660 D661 D662 D663 D664 D665 D666 D667 D668 D669 D670 D671 D672 D673 D674 D675 D676 D677 D678 D679 D680 D681 D682 D683 D684 D685 D686 D687 D688 D689 D690 D691 D692 D693 D694 D695 D696 D697 D698 D699 D700 D701 D702 D703 D704 D705 D706 D707 D708 D709 D710 D711 D712 D713 D714 D715 D716 D717 D718 D719 D720 D721 D722 D723 D724 D725 D726 D727 D728 D729 D730 D731 D732 D733 D734 D735 D736 D737 D738 D739 D740 D741 D742 D743 D744 D745 D746 D747 D748 D749 D750 D751 D752 D753 D754 D755 D756 D757 D758 D759 D760 D761 D762 D763 D764 D765 D766 D767 D768 D769 D770 D771 D772 D773 D774 D775 D776 D777 D778 D779 D780 D781 D782 D783 D784 D785 D786 D787 D788 D789 D790 D791 D792 D793 D794 D795 D796 D797 D798 D799 D800 D801 D802 D803 D804 D805 D806 D807 D808 D809 D810 D811 D812 D813 D814 D815 D816 D817 D818 D819 D820 D821

(No.20434)

(2) Front Section



H I J K L M N O P Q R S T

SCANDINAVIA
CONTINENTAL EUROPE
GERMANY
ITALY

ENE-090-3

FW801

FW801

PT001

TB002
TB001

(A, BS) A FOR AUSTRALIA
BS FOR U.K.

ENH-230-1

J802

ENE-090-3

FW801

FW802

FW801

F102 T2A

F101 T2A

PT001

TH FUSE

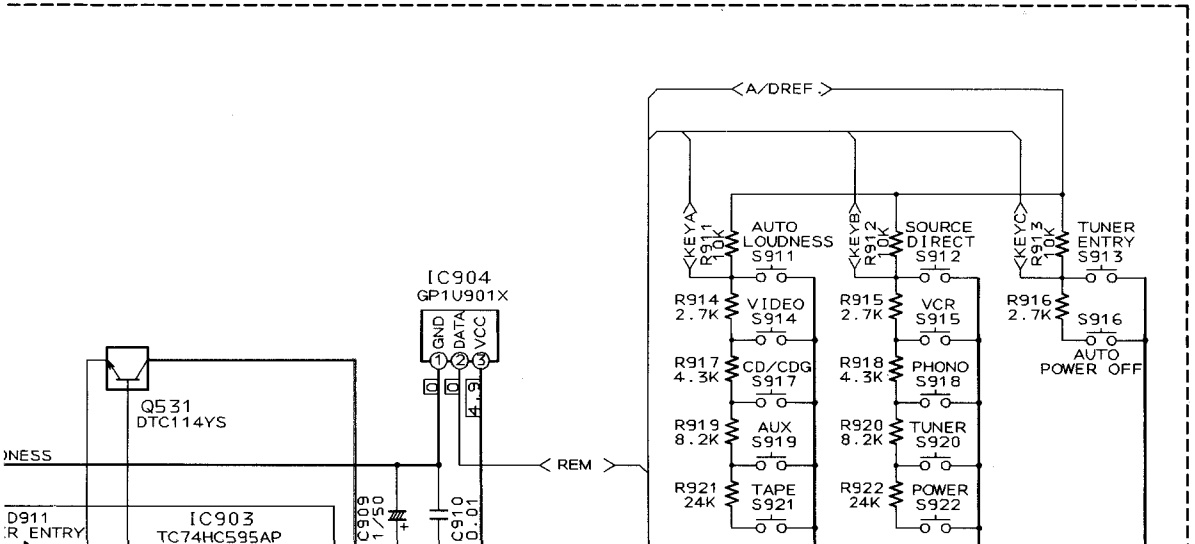
F001 T1.25A

NEUTRAL (BLU)

LIVE (BRN)

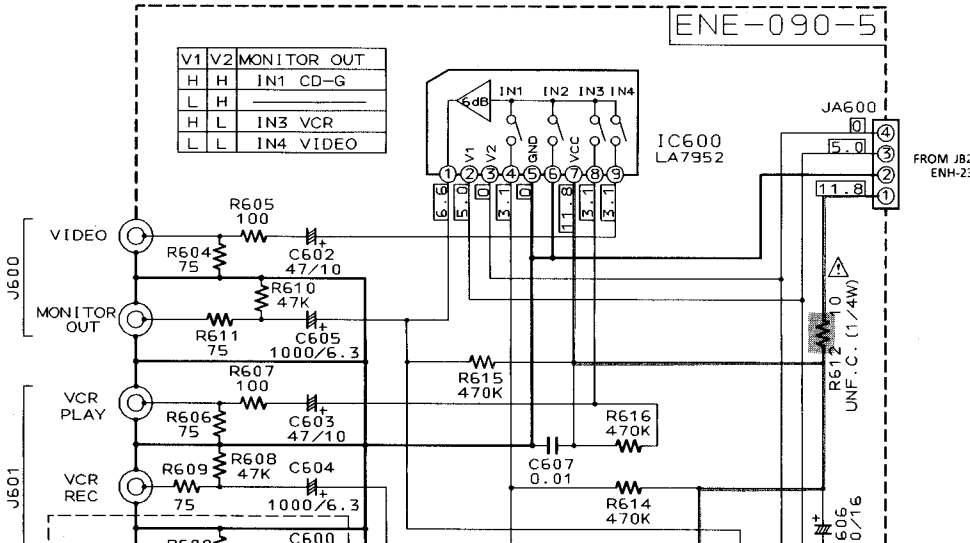
AC 240V /50Hz

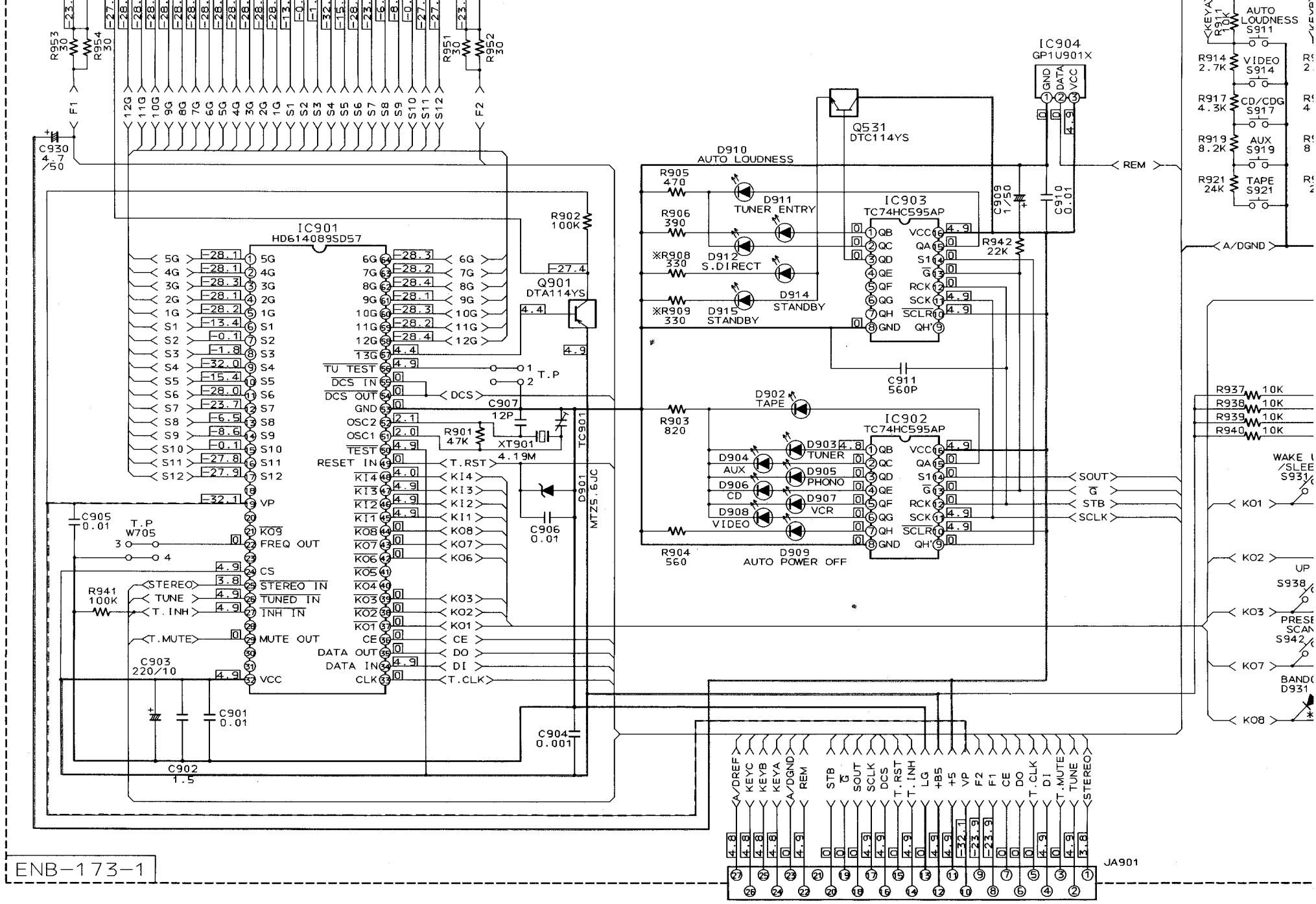
ENE-090-1



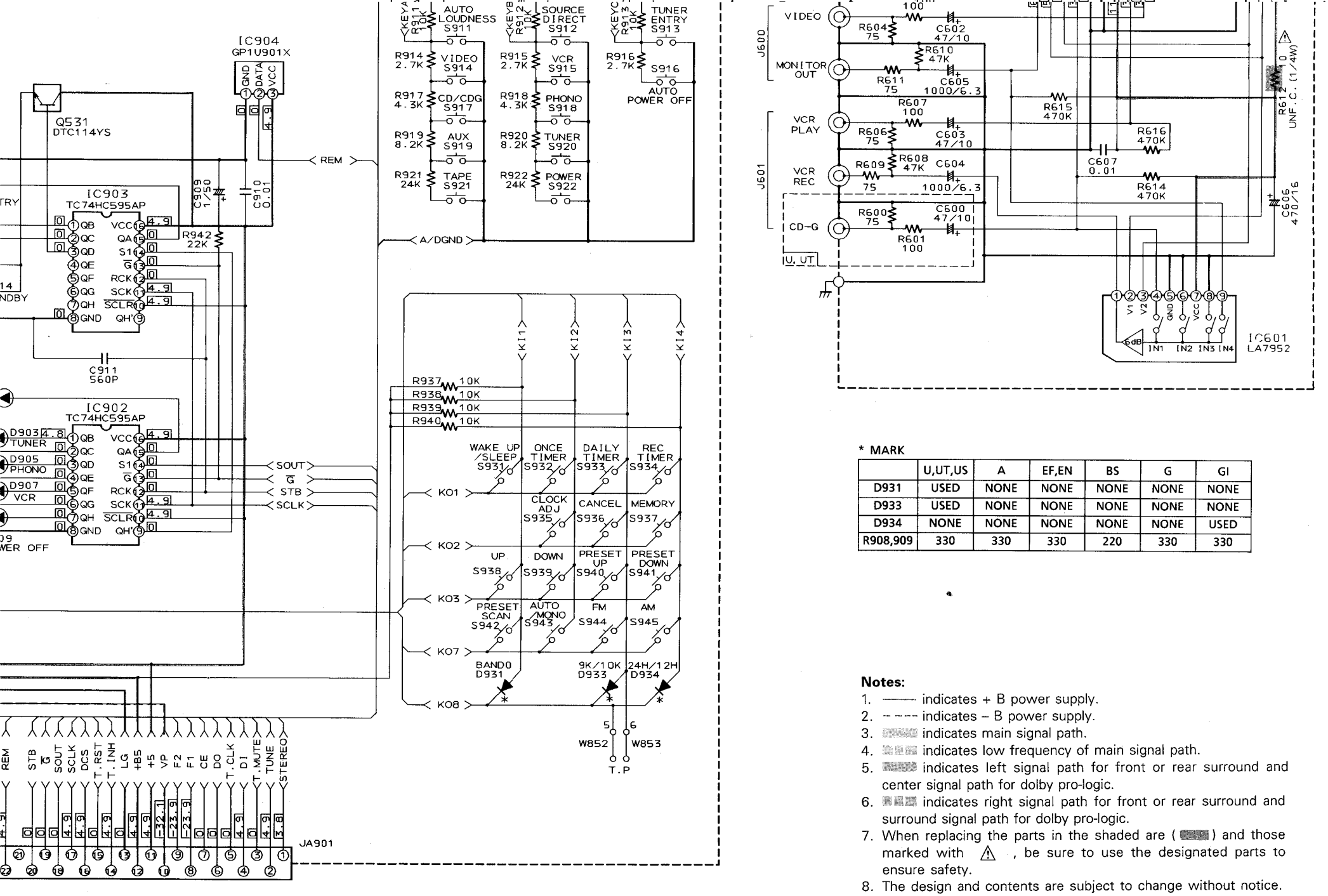
ENE-090-5

V1	V2	MONITOR OUT
H	H	IN1 CD-G
L	H	———
H	L	IN3 VCR
L	L	IN4 VIDEO




IC901
HD614089SD57
IC903
TC74HC595AP
IC902
TC74HC595AP
IC904
GP1U901X
Q531
DTC114YS
Q901
DTA114YS
D910
AUTO LOUDNESS
D911
TUNER ENTRY
D912
S.DIRECT
D914
STANDBY
D915
STANDBY
D902
TAPE
D903
TUNER
D904
AUX
D905
PHONO
D906
CD
D907
VCR
D908
VIDEO
D909
AUTO POWER OFF
XT901
4.19M
MTZ5.6JC
T.P
W705
REM
A/DGND
SOUT
STB
SCLK
DCS
T.RST
T.INH
T.MUTE
T.CLK
CE
DO
DI
KEYA
KEYB
KEYC
A/DREF
STEREO
TUNE
JA901
ENB-173-1

(No.20434)



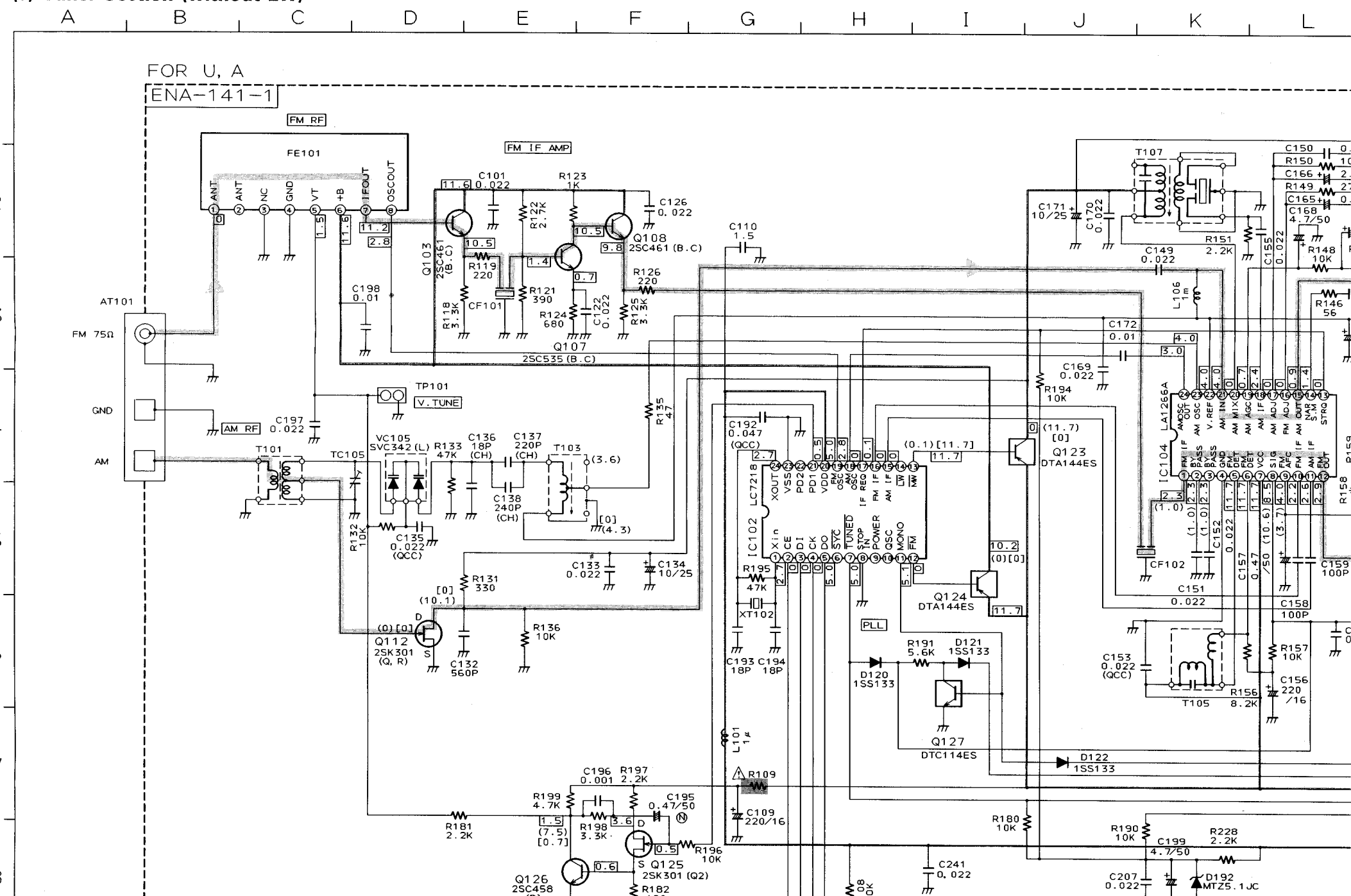
* MARK

	U,UT,US	A	EF,EN	BS	G	GI
D931	USED	NONE	NONE	NONE	NONE	NONE
D933	USED	NONE	NONE	NONE	NONE	NONE
D934	NONE	NONE	NONE	NONE	NONE	USED
R908,909	330	330	330	220	330	330

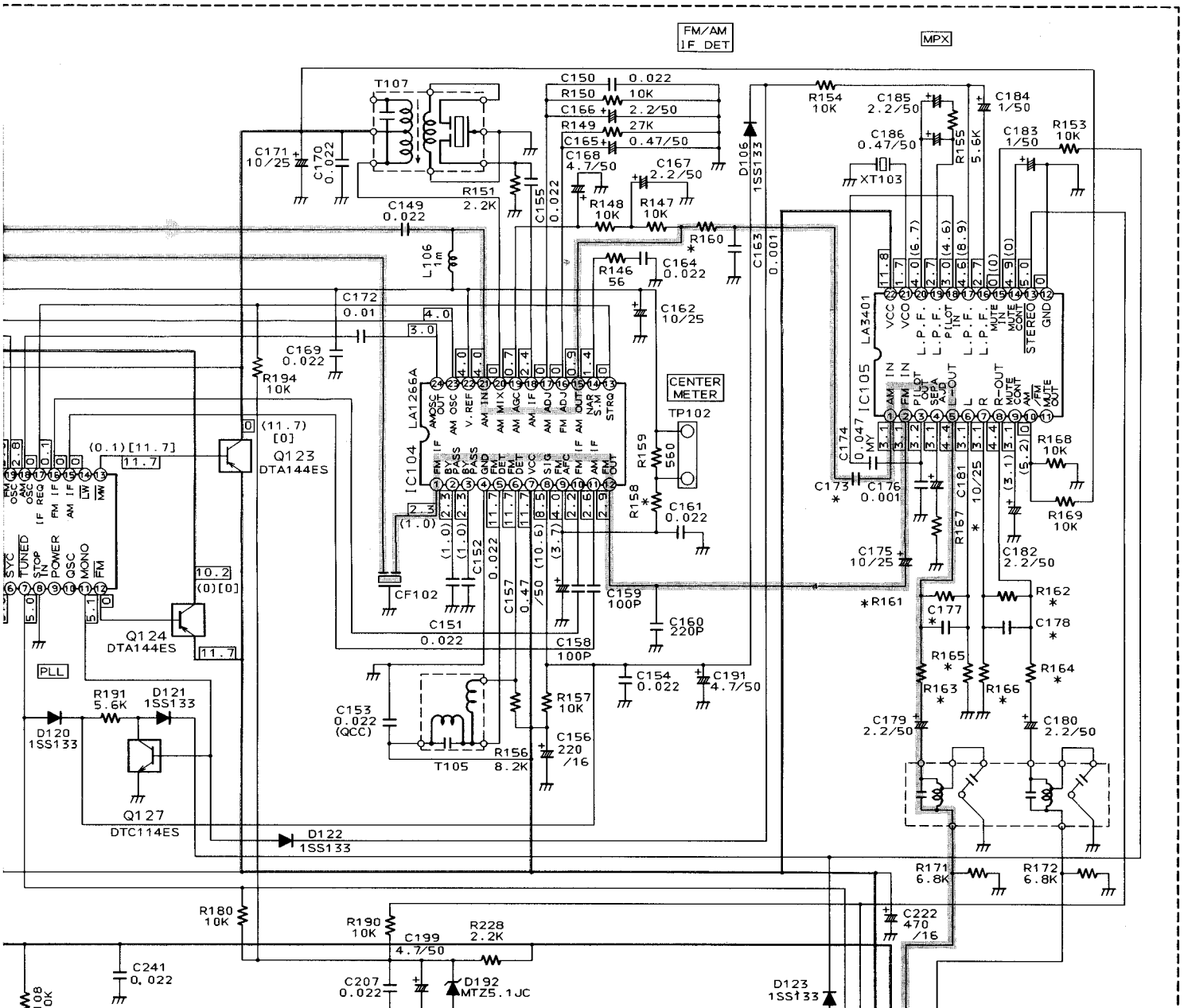
Notes:

1. —— indicates + B power supply.
2. - - - - indicates – B power supply.
3. ▒▒▒ indicates main signal path.
4. ▒▒▒ indicates low frequency of main signal path.
5. ▒▒▒ indicates left signal path for front or rear surround and center signal path for dolby pro-logic.
6. ▒▒▒ indicates right signal path for front or rear surround and surround signal path for dolby pro-logic.
7. When replacing the parts in the shaded are (▒▒▒) and those marked with ⚠ , be sure to use the designated parts to ensure safety.
8. The design and contents are subject to change without notice.

(3) Tuner Section (without LW)



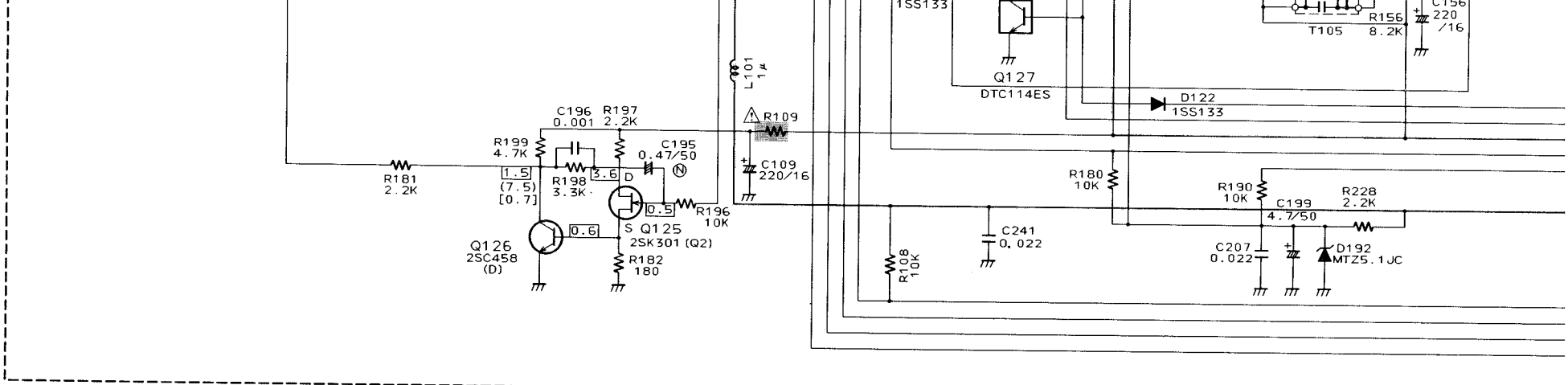
H I J K L M N O P Q R S T



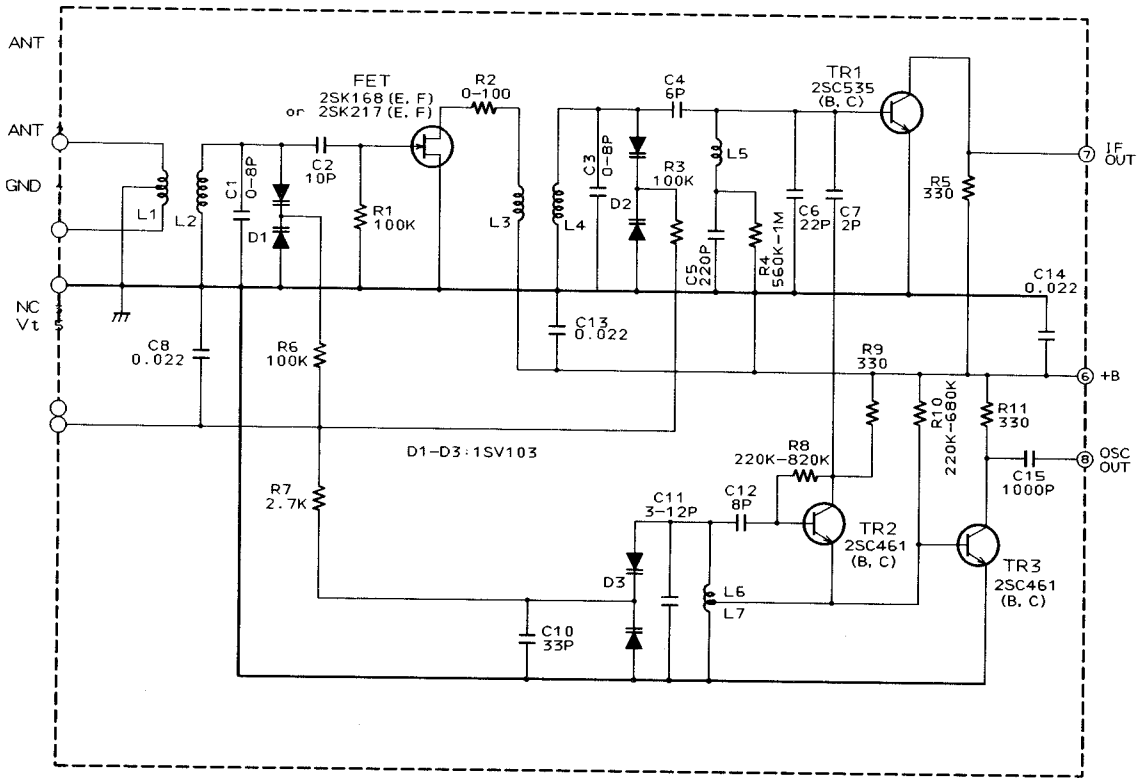
* MARK

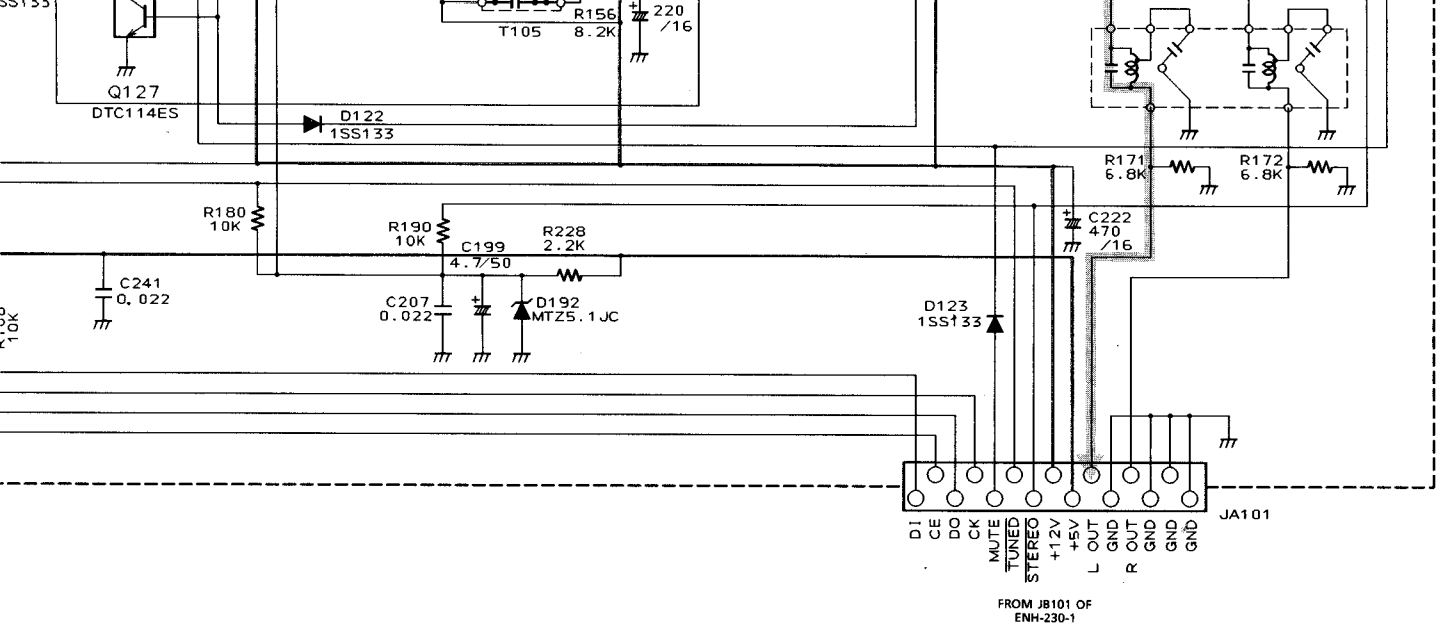
	U	A
R109	68 UNF.F. (1/4W)	68 UNF.F. (1/4W)
R167	39K	47K
R160	5.6K	10K
R161, 162	82K	100K
R163, 164	4.7K	3.3K
R165, 166	180K	270K
C177, 178	820P	560P
R158	27K	27K
C173	0.039	0.022

□ FM AUTO NO SIGNAL
( ) MW NO SIGNAL
[ ] LW NO SIGNAL

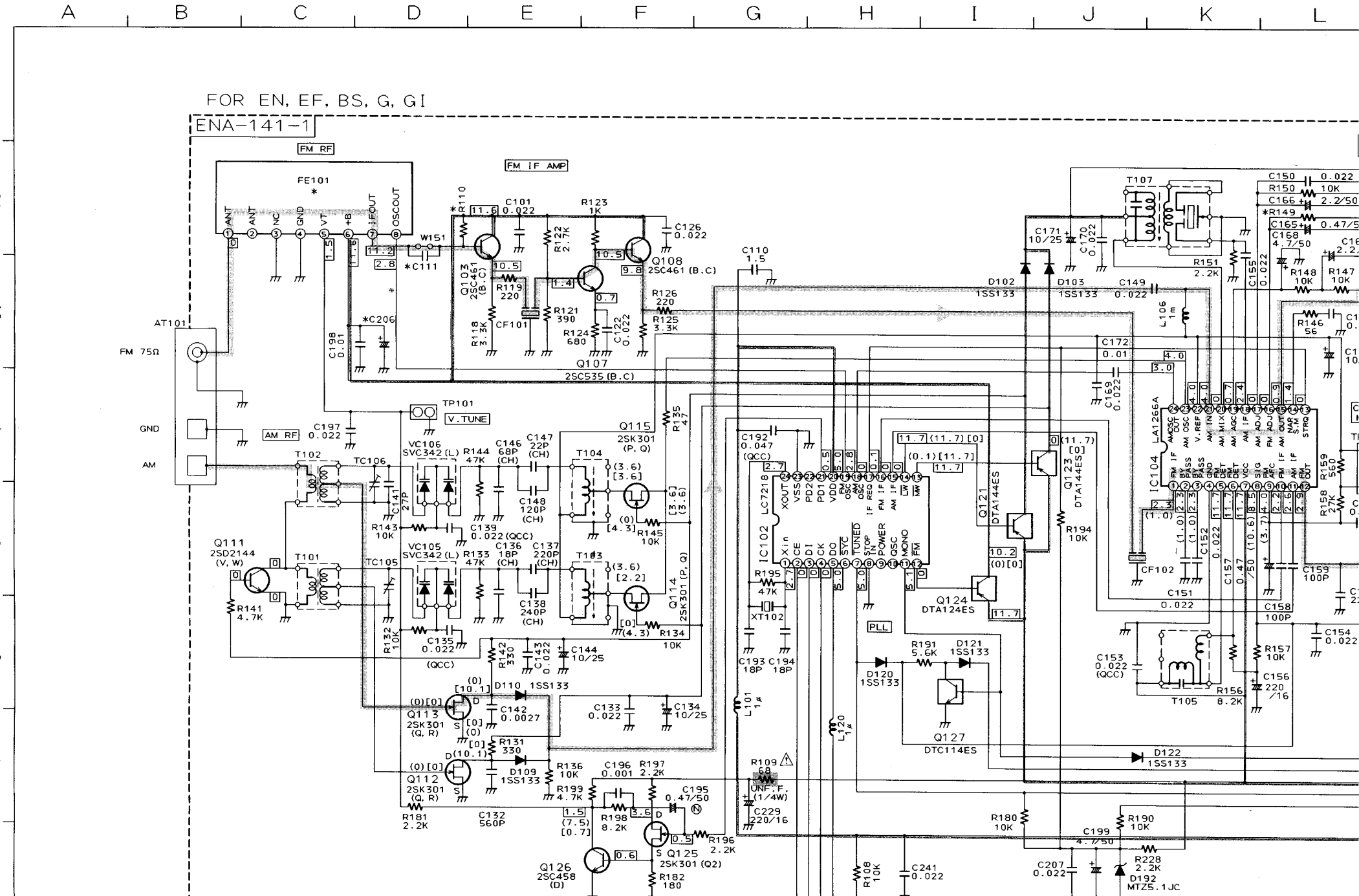


FE101
EAF2203-001

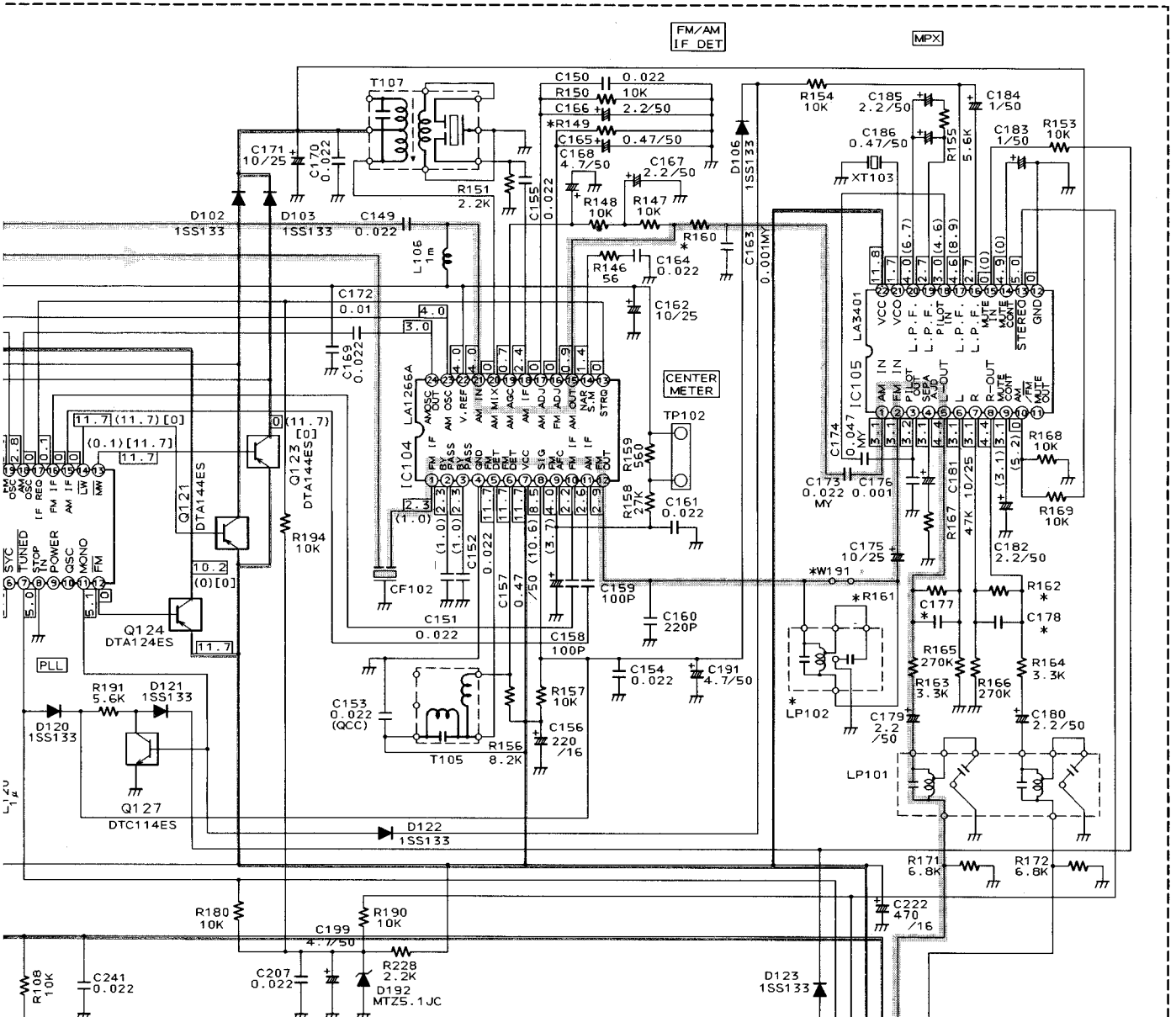



Q127
DTC114ES
D122
1SS133
T105
R156
8.2K
220
/16
R171
6.8K
R172
6.8K
C222
470
/16
R180
10K
R190
10K
C199
4.7/50
R228
2.2K
C241
0.022
C207
0.022
D192
MTZ5.1JC
D123
1SS133
JA101
D1
CE
DO
CK
MUTE
TUNED
STEREO
+12V
+5V
L OUT
GND
R OUT
GND
GND
GND
FROM JB101 OF
ENH-230-1

(4) Tuner Section (with LW)



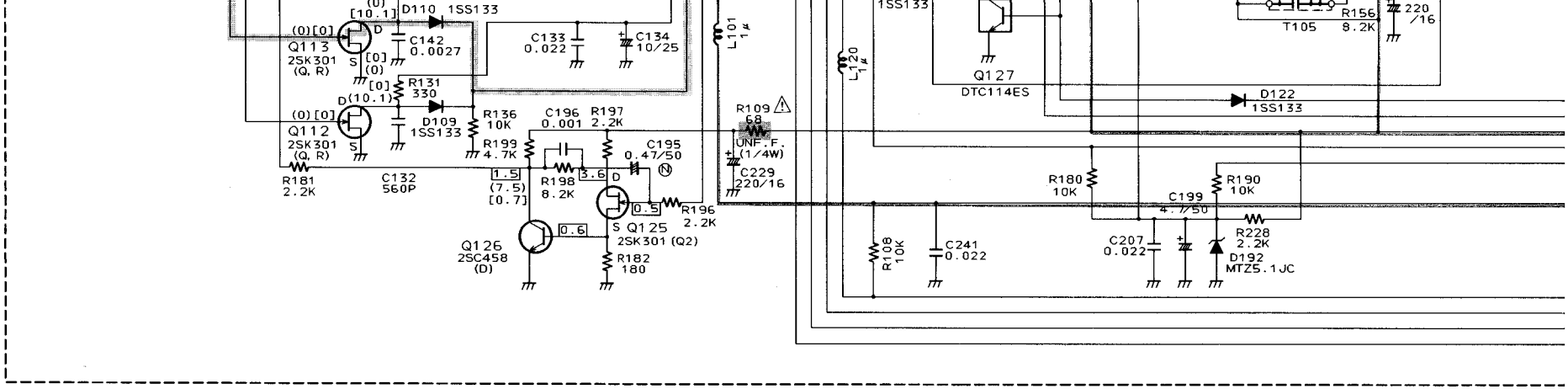
H I J K L M N O P Q R S T



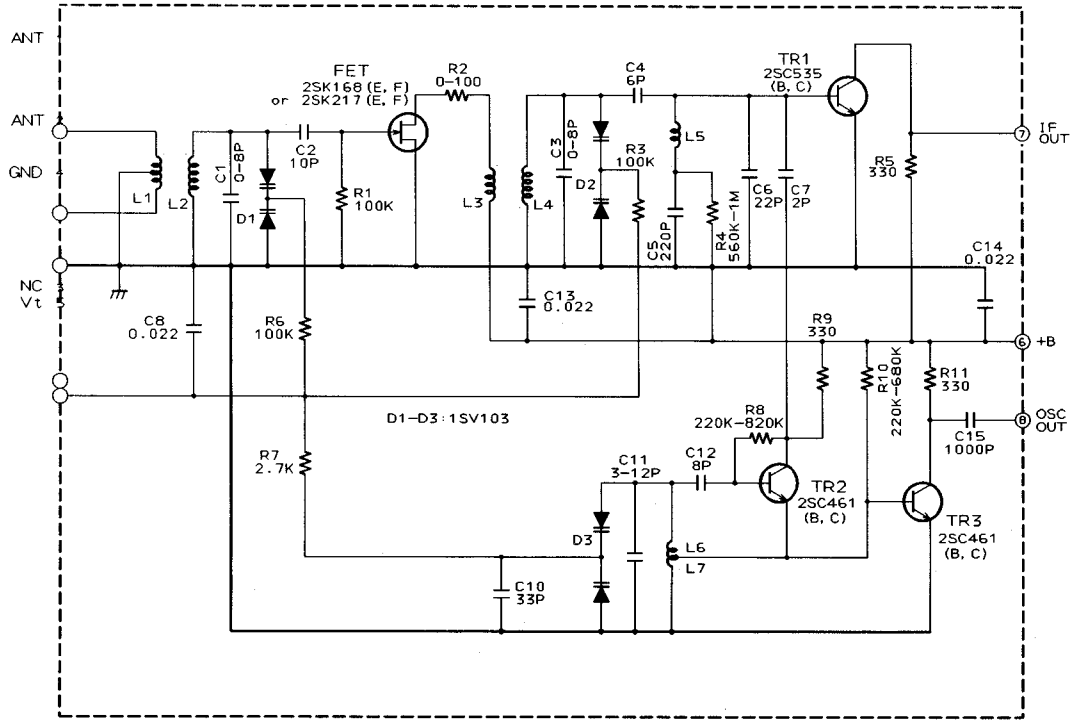
* MARK

	EN, EF	G, GI	BS
R160	10K	10K	1K
R161, 162	100K	100K	68K
C177, 178	560P	560P	820P
FE101	EAF2203-001	EAF2203-003	EAF2203-001
LP102	NONE	USED	NONE
W191	USED	NONE	USED
R149	22K	27K	22K
R110	NONE	NONE	NONE
C111	NONE	NONE	NONE
W151	USED	USED	USED
C107	NONE	47/50	NONE

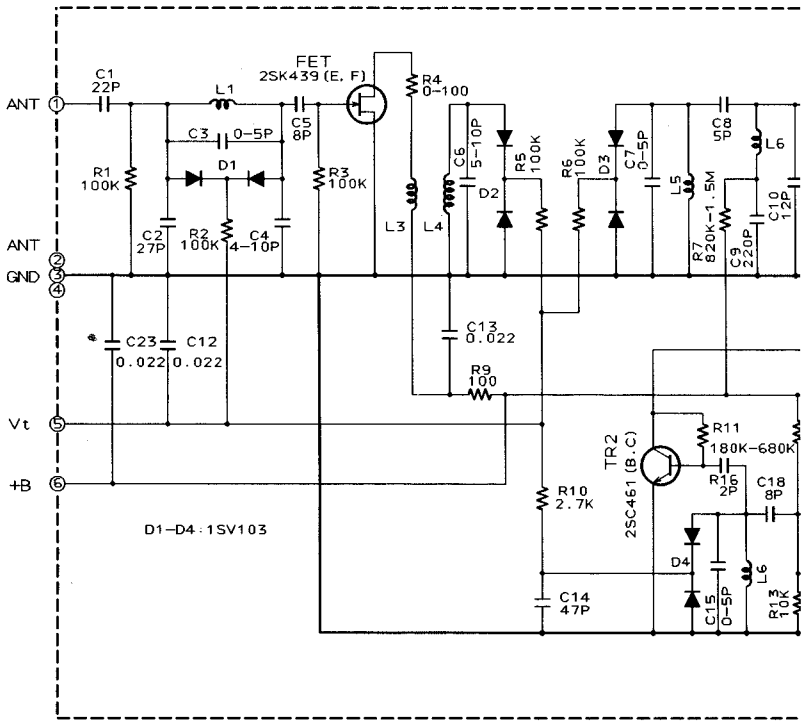
□ FM AUTO NO SIGNAL
( ) MW NO SIGNAL
[ ] LW NO SIGNAL

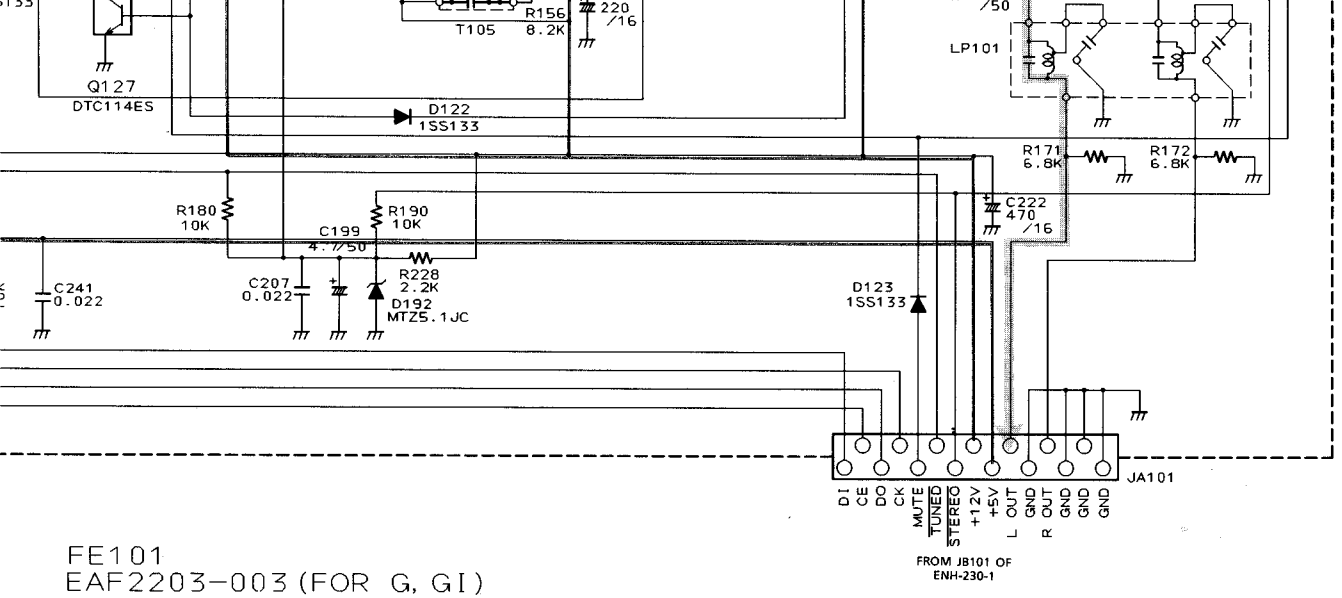


FE101
EAF2203-001 (FOR EN, EF, BS)

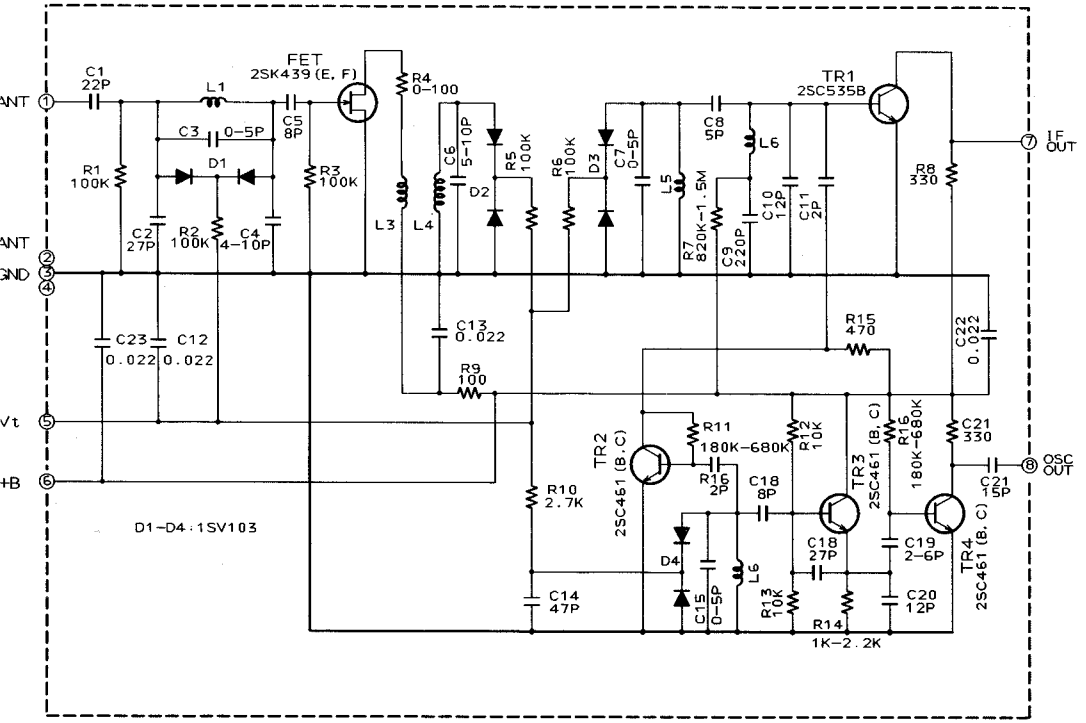


FE101
EAF2203-003 (FOR G, GI)



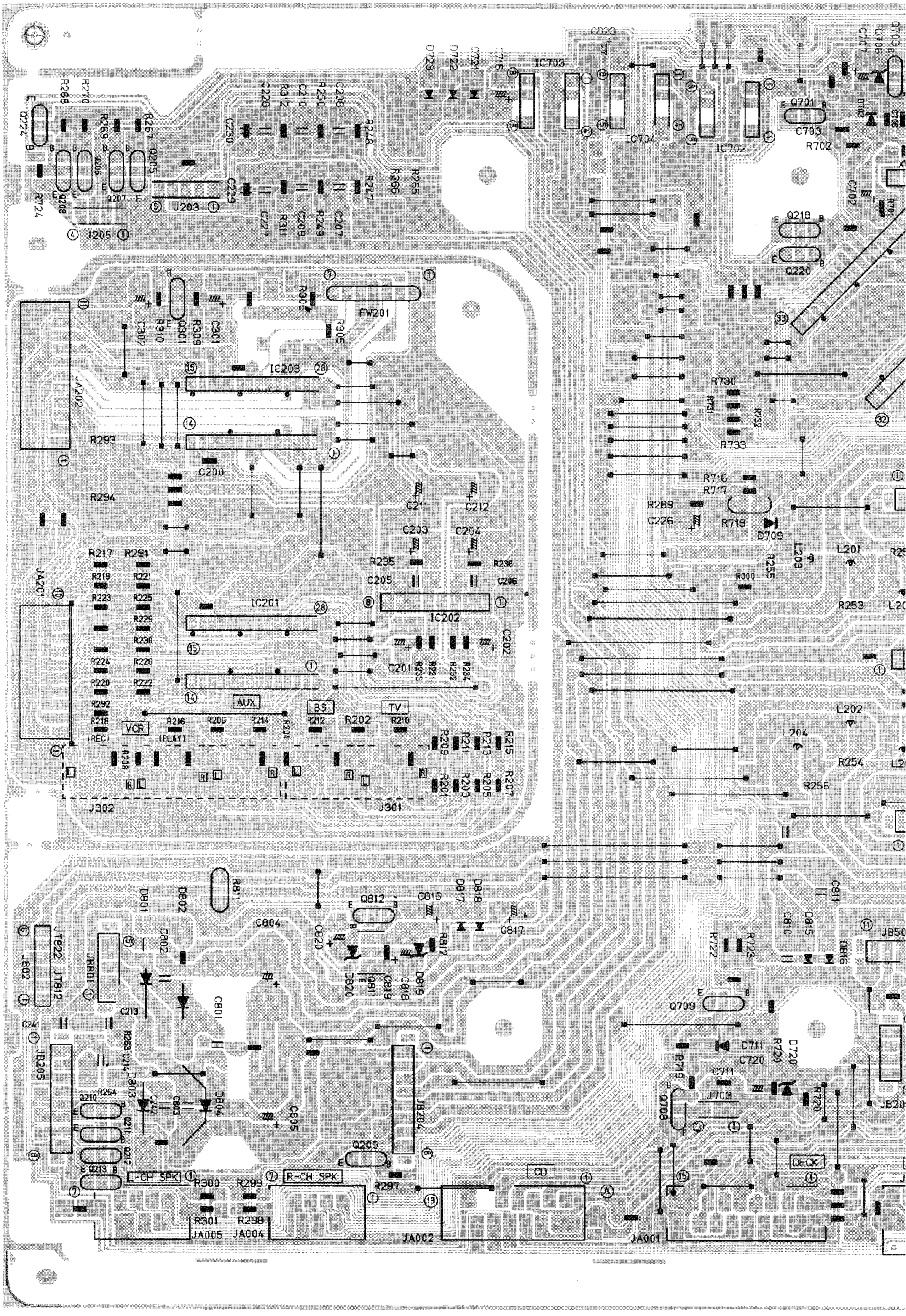


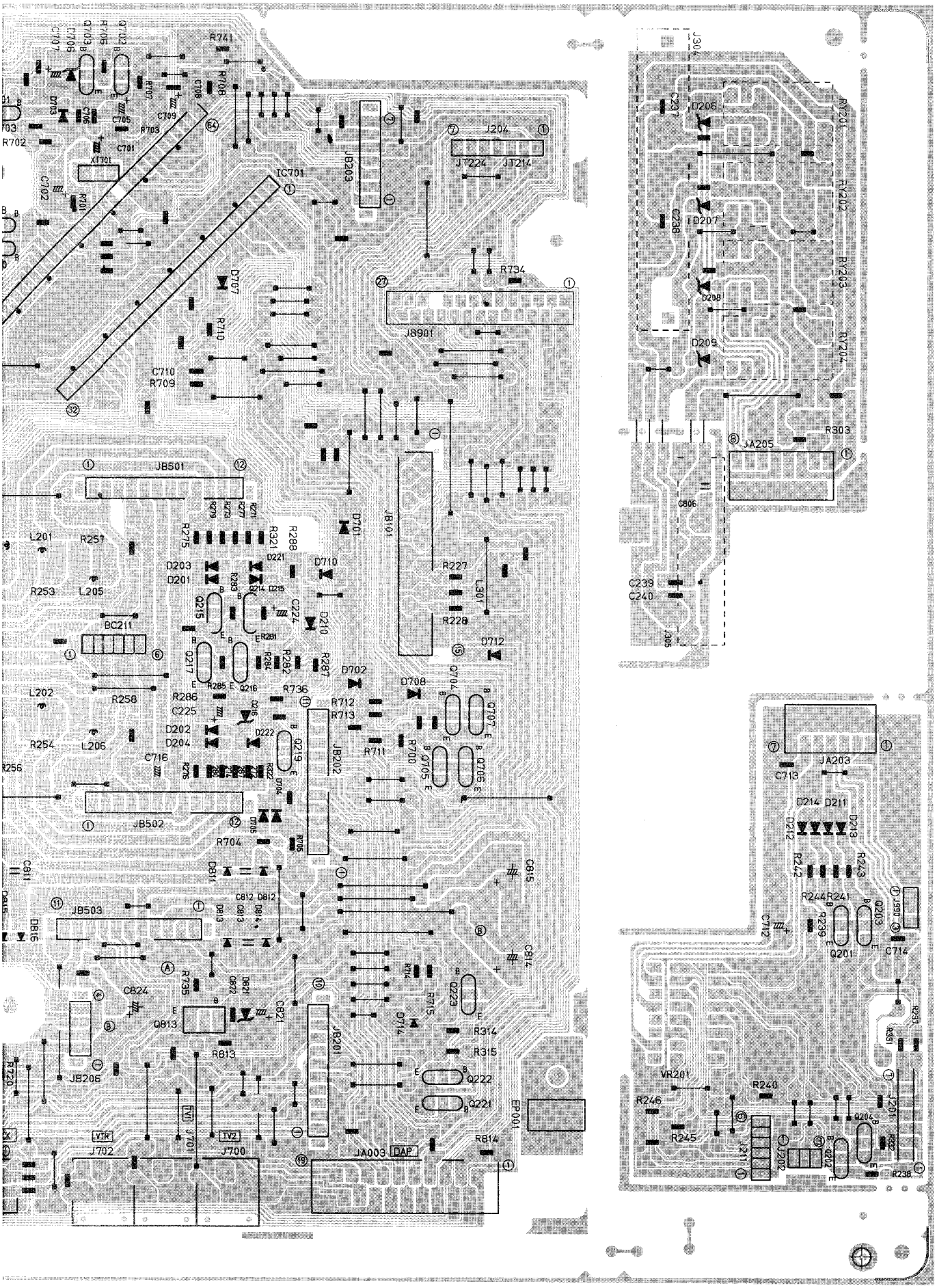
FE101
EAF2203-003 (FOR G, GI)



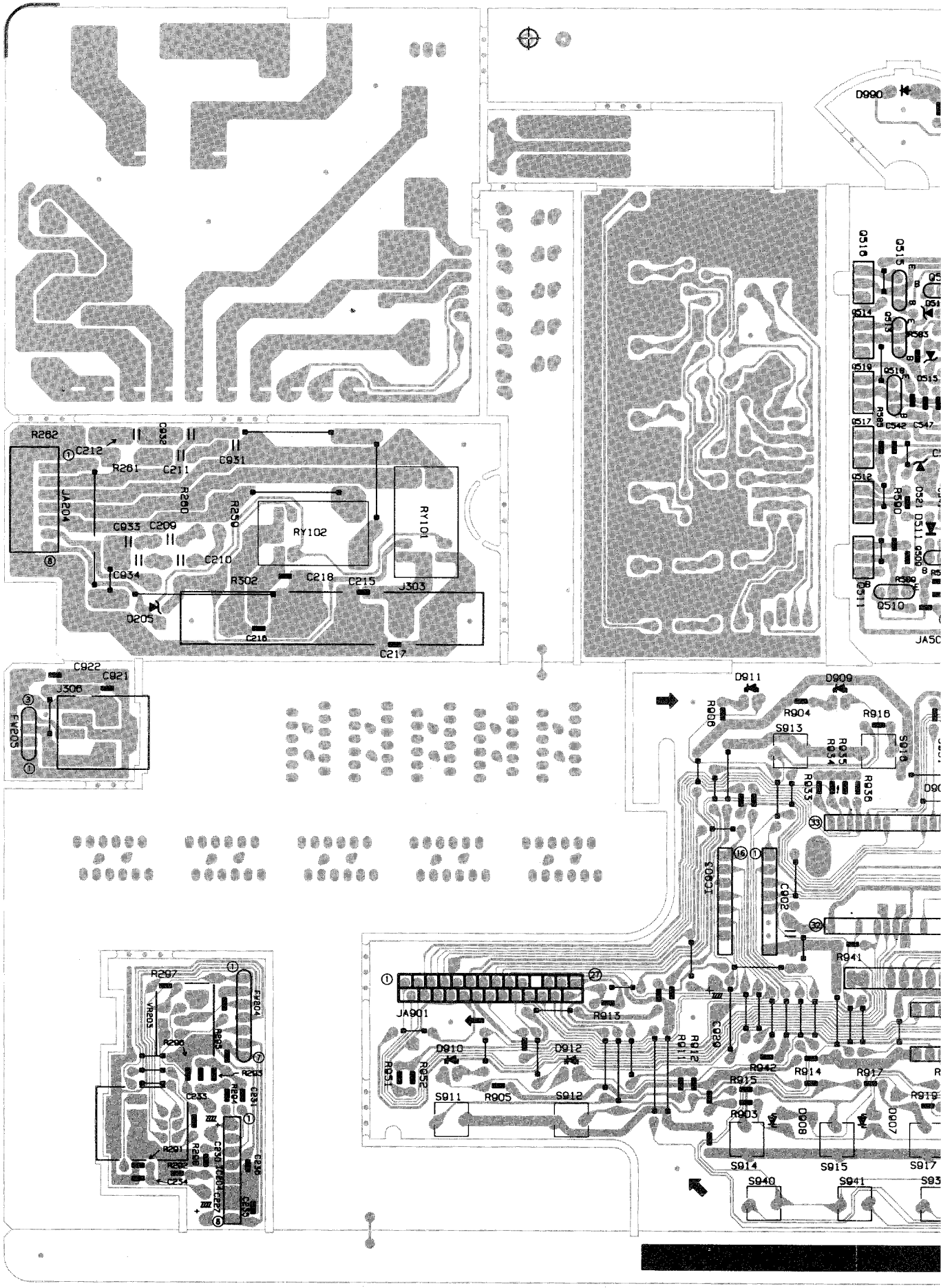
Printed Circuit Boards

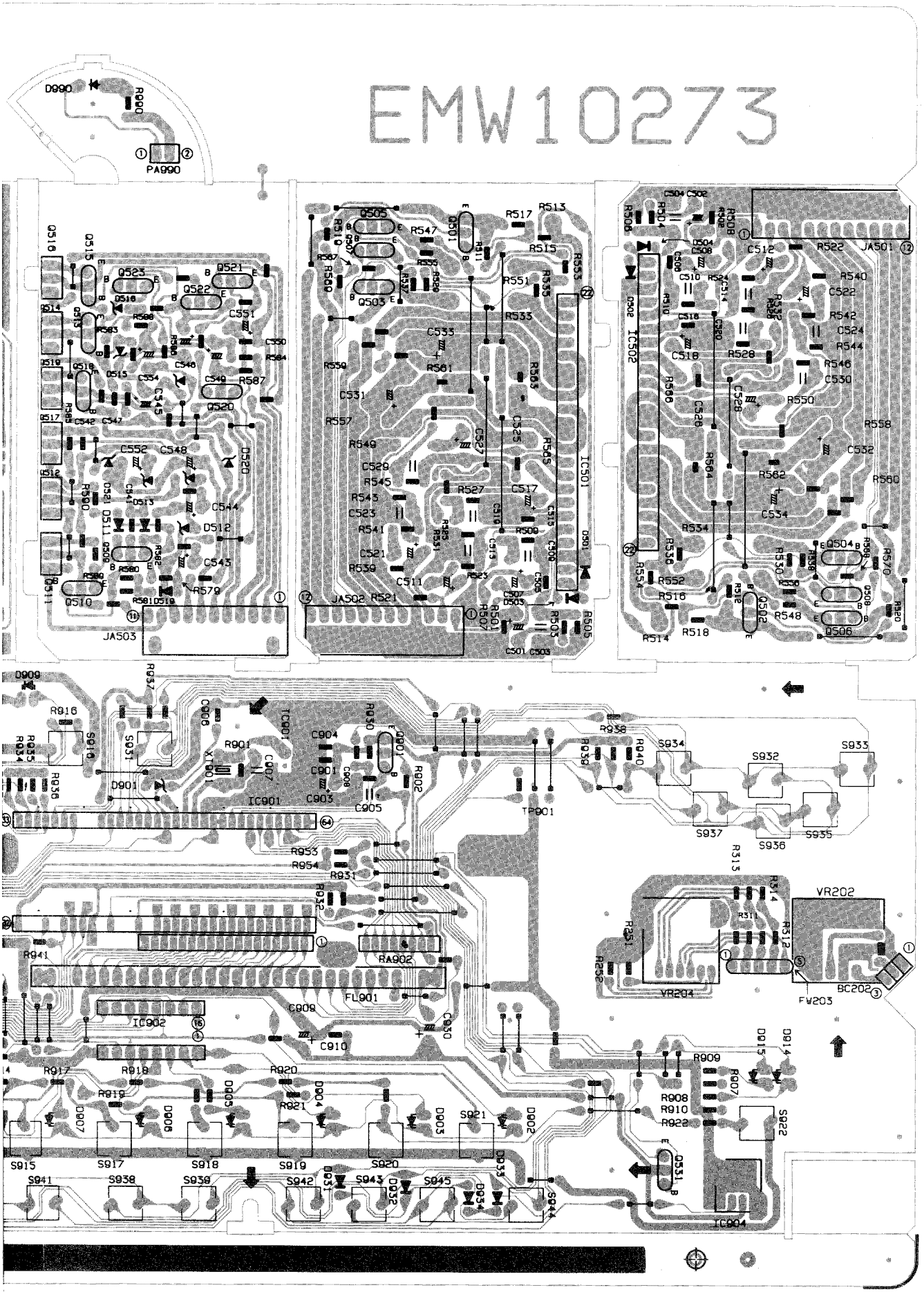
(1) Main & Volume P.C. Board (ENH-230)



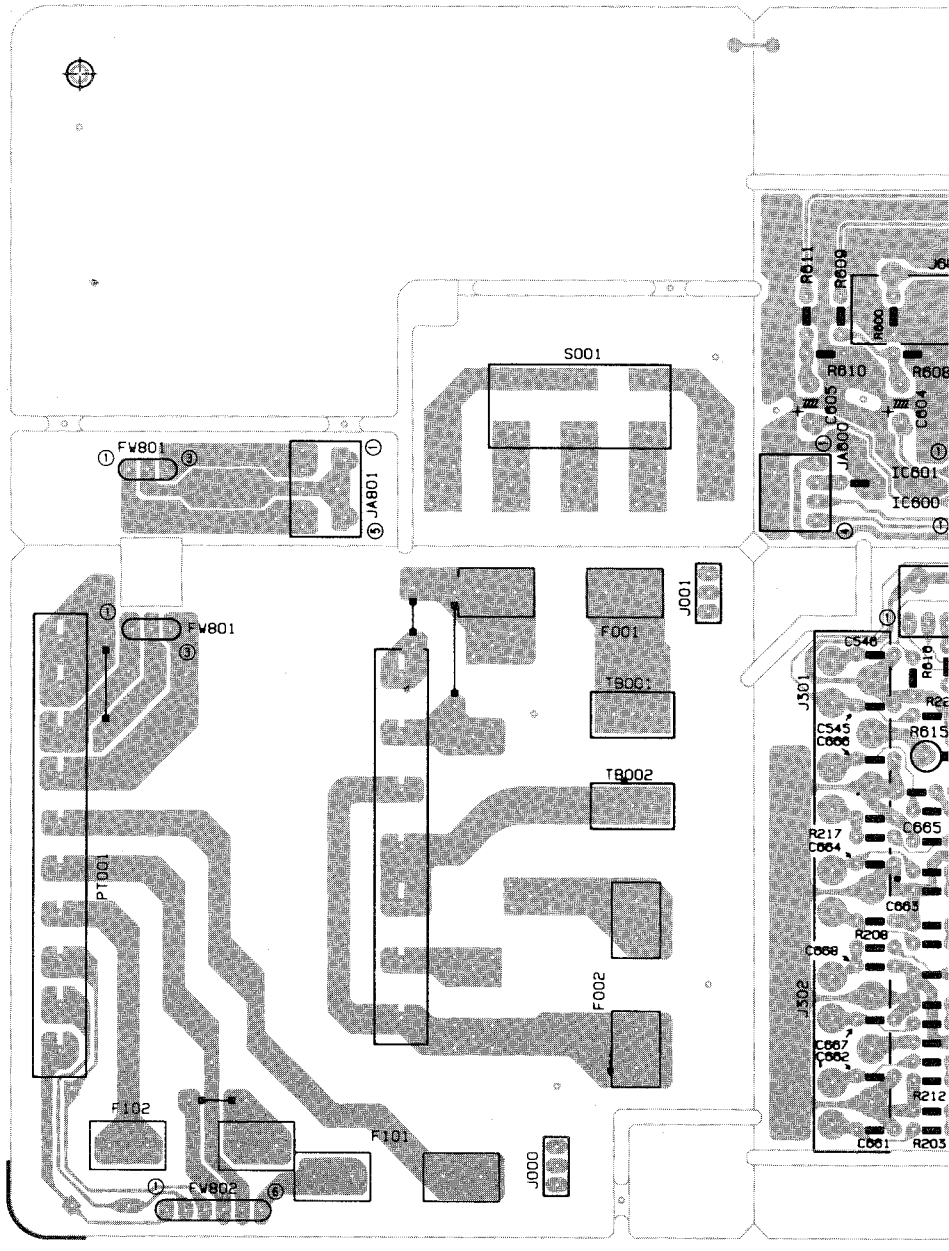

R741
C705
C709
R703
C701
XT701
IC701
JB203
J204
JT224
JT214
R734
J8901
C710
R709
JB501
L201
R257
R253
L205
D203
D201
D221
D710
R227
L301
R228
BC211
D712
L202
R258
R286
C225
D202
D204
D222
C716
R736
R712
R713
D702
D708
R711
R700
JB202
JB502
R704
C811
C815
JB503
C812
D812
C824
C821
Q813
R813
R735
R715
R314
R315
Q222
Q221
JB206
R720
VTR
TV1
J701
TV2
J702
J700
JA003
DAP
R814
EP001
J304
D206
D207
D208
D209
RV201
RV202
RV203
RV204
C231
C238
JA205
R303
C806
C239
C240
J305
JA203
C713
D214
D211
D212
D213
R242
R243
R244
R241
Q203
C712
R239
Q201
C714
R237
R231
VR201
R240
R246
R245
J211
J202
J201
Q204
Q202
R232
R238

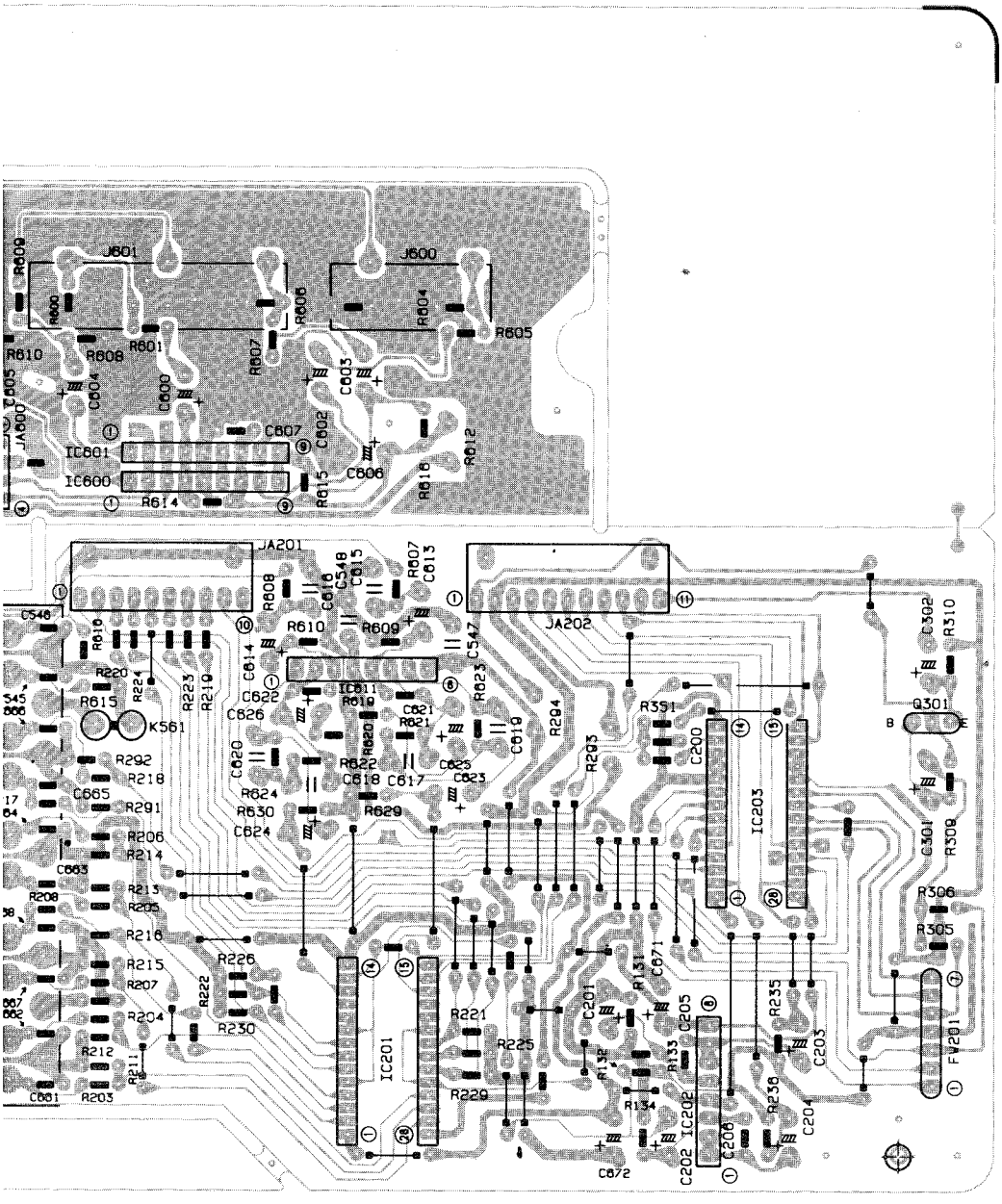
(2) Front, Speaker & Amplifier P.C. Board (ENB-173)



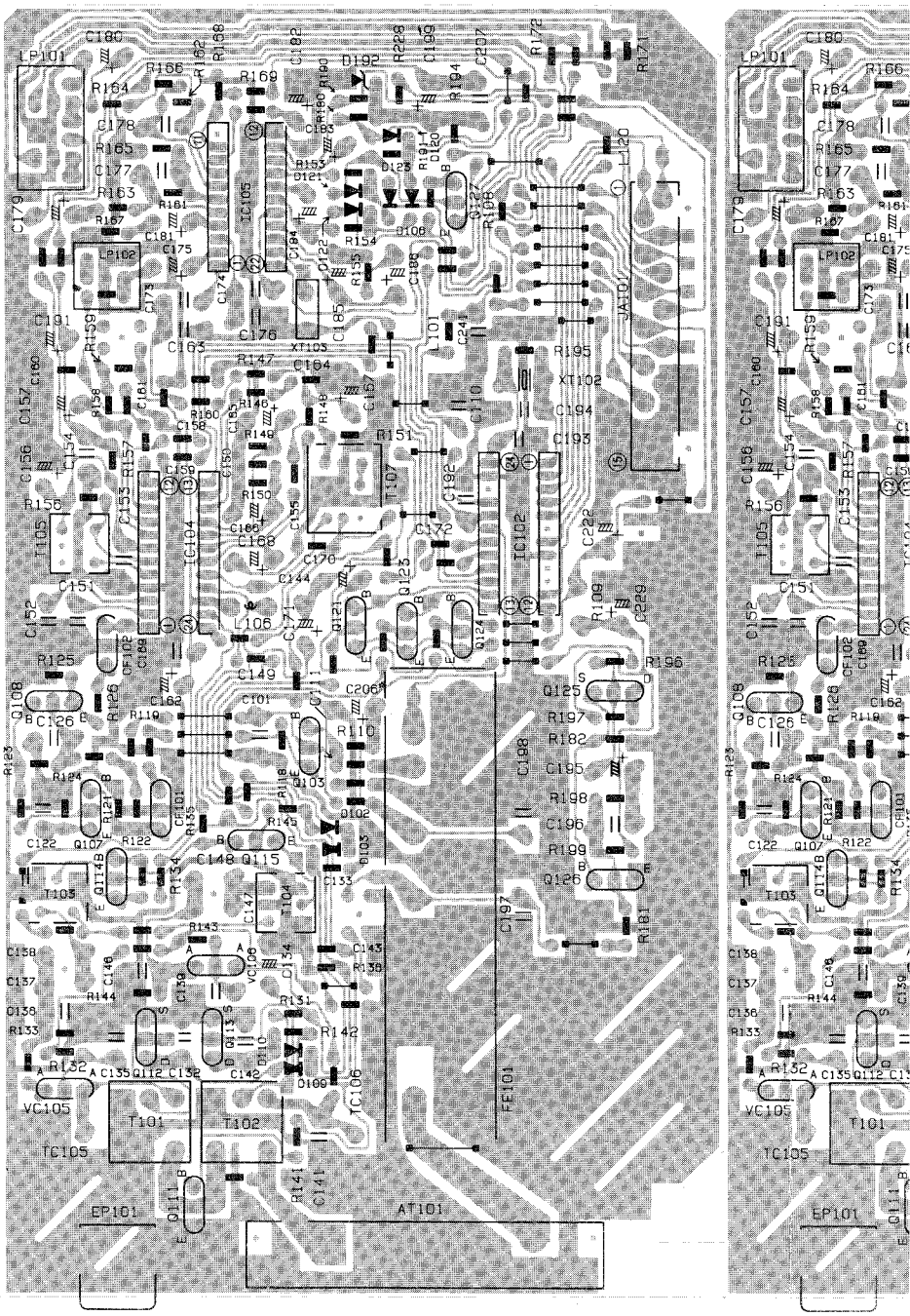

EMW10273

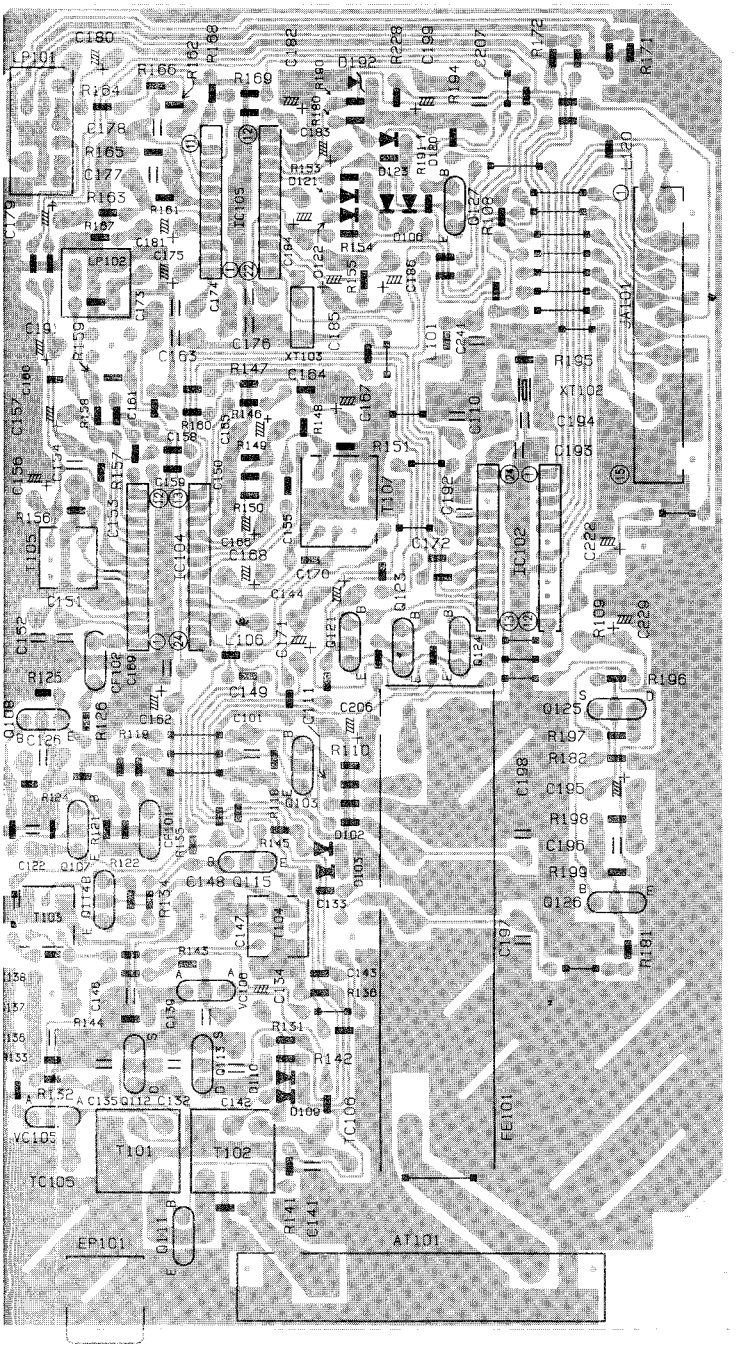
(3) Source Selector & Power Supply P.C. Board (ENE-090)




J601
J600
R609
R600
R606
R604
R605
R610
R608
R601
R607
C605
C604
C600
C603
C607
C602
IC601
IC600
R614
C606
R615
R618
R612
JA201
JA202
C548
C616
C615
R607
C613
R808
R610
R609
C614
C622
C626
IC611
R619
C621
R621
R623
C547
C619
R204
R351
C200
IC203
C302
R310
Q301
B
E
C301
R309
R306
R305
FW201
R616
R220
R224
R223
R219
R615
K561
R292
R218
C665
R291
R206
R214
C663
R208
R213
R205
R216
R215
R207
R204
R212
R211
C661
R203
C620
R624
R630
C624
R622
C618
C617
C623
R629
R226
R222
R230
IC201
R221
R225
R229
C201
R131
C671
R132
R133
C205
R134
C202
IC202
C206
C672
R235
C203
R238
C204

(4) Tuner CB (ENA-141)


LP101
LP102
C180
R166
R164
C178
R165
C177
R163
R161
R167
C181
C175
C179
C173
C191
C160
C157
C156
C154
R158
R159
C161
R160
C158
C153
R157
R156
T105
C151
C152
IC104
CF102
CF101
C109
R125
C149
C162
C101
C206
C108
B
C126
R119
R110
R123
R124
R121
C122
Q107
R122
C148
Q115
R134
Q114
T103
C147
R143
C158
C146
C137
C139
VC106
C154
C145
R138
R144
C136
R133
R131
R142
R132
C135
Q112
C132
C142
D109
VC105
T101
T102
TC106
TC105
EP101
Q111
C141
AT101
FE101
C197
R181
C198
C195
R198
C196
R199
Q126
R197
R182
Q125
R196
C229
IC102
C222
C193
C194
XT102
R195
L101
C244
C185
C176
XT103
C165
R147
C164
C157
R146
R149
C155
C166
C168
C170
C144
C171
L106
C172
T107
C163
R151
R150
C150


LP101
C180
R166
R164
C178
R165
C177
R163
R161
R167
C181
C175
LP102
C173
C174
C179
C163
C176
XT103
R147
C184
C167
R148
R146
R149
C158
C150
R150
C166
C168
C170
C144
C151
C152
C102
C160
L106
C177
C149
C101
C162
R118
C126
R125
R126
Q108
R124
R121
C122
Q107
R122
C148
Q114
R134
T103
C147
T104
R143
VC106
C134
C143
R138
R144
R131
R142
Q113
Q110
D109
R152
C135
Q112
C132
C142
VC105
T101
T102
TC105
EP101
Q111
R141
C141
AT101
C107
EE101
C133
D102
D103
C153
R145
R155
R156
C154
R157
C156
C155
C153
C104
C105
R158
C157
C160
R159
C19
C161
C165
R160
C159
R154
C185
C122
C184
D121
R153
D123
D106
C186
R191
R190
C187
R189
R180
C188
R193
C182
R168
R162
R169
D192
C228
C199
C207
R194
R172
R171
C180
R170
C183
R190
R180
C189
R191
R189
C187
R188
C190
R187
C191
R186
C192
R185
C193
R184
C194
R183
C195
R182
C196
R181
C197
R180
C198
R179
C199
R178
C200
R177
C201
R176
C202
R175
C203
R174
C204
R173
C205
R172
C206
R171
C207
R170
C208
R169
C209
R168
C210
R167
C211
R166
C212
R165
C213
R164
C214
R163
C215
R162
C216
R161
C217
R160
C218
R159
C219
R158
C220
R157
C221
R156
C222
R155
C223
R154
C224
R153
C225
R152
C226
R151
C227
R150
C228
R149
C229
R148
C230
R147
C231
R146
C232
R145
C233
R144
C234
R143
C235
R142
C236
R141
C237
R140
C238
R139
C239
R138
C240
R137
C241
R136
C242
R135
C243
R134
C244
R133
C245
R132
C246
R131
C247
R130
C248
R129
C249
R128
C250
R127
C251
R126
C252
R125
C253
R124
C254
R123
C255
R122
C256
R121
C257
R120
C258
R119
C259
R118
C260
R117
C261
R116
C262
R115
C263
R114
C264
R113
C265
R112
C266
R111
C267
R110
C268
R109
C269
R108
C270
R107
C271
R106
C272
R105
C273
R104
C274
R103
C275
R102
C276
R101
C277
R100
C278
R99
C279
R98
C280
R97
C281
R96
C282
R95
C283
R94
C284
R93
C285
R92
C286
R91
C287
R90
C288
R89
C289
R88
C290
R87
C291
R86
C292
R85
C293
R84
C294
R83
C295
R82
C296
R81
C297
R80
C298
R79
C299
R78
C300
R77
C301
R76
C302
R75
C303
R74
C304
R73
C305
R72
C306
R71
C307
R70
C308
R69
C309
R68
C310
R67
C311
R66
C312
R65
C313
R64
C314
R63
C315
R62
C316
R61
C317
R60
C318
R59
C319
R58
C320
R57
C321
R56
C322
R55
C323
R54
C324
R53
C325
R52
C326
R51
C327
R50
C328
R49
C329
R48
C330
R47
C331
R46
C332
R45
C333
R44
C334
R43
C335
R42
C336
R41
C337
R40
C338
R39
C339
R38
C340
R37
C341
R36
C342
R35
C343
R34
C344
R33
C345
R32
C346
R31
C347
R30
C348
R29
C349
R28
C350
R27
C351
R26
C352
R25
C353
R24
C354
R23
C355
R22
C356
R21
C357
R20
C358
R19
C359
R18
C360
R17
C361
R16
C362
R15
C363
R14
C364
R13
C365
R12
C366
R11
C367
R10
C368
R9
C369
R8
C370
R7
C371
R6
C372
R5
C373
R4
C374
R3
C375
R2
C376
R1
C377
R0
C378
R-1
C379
R-2
C380
R-3
C381
R-4
C382
R-5
C383
R-6
C384
R-7
C385
R-8
C386
R-9
C387
R-10
C388
R-11
C389
R-12
C390
R-13
C391
R-14
C392
R-15
C393
R-16
C394
R-17
C395
R-18
C396
R-19
C397
R-20

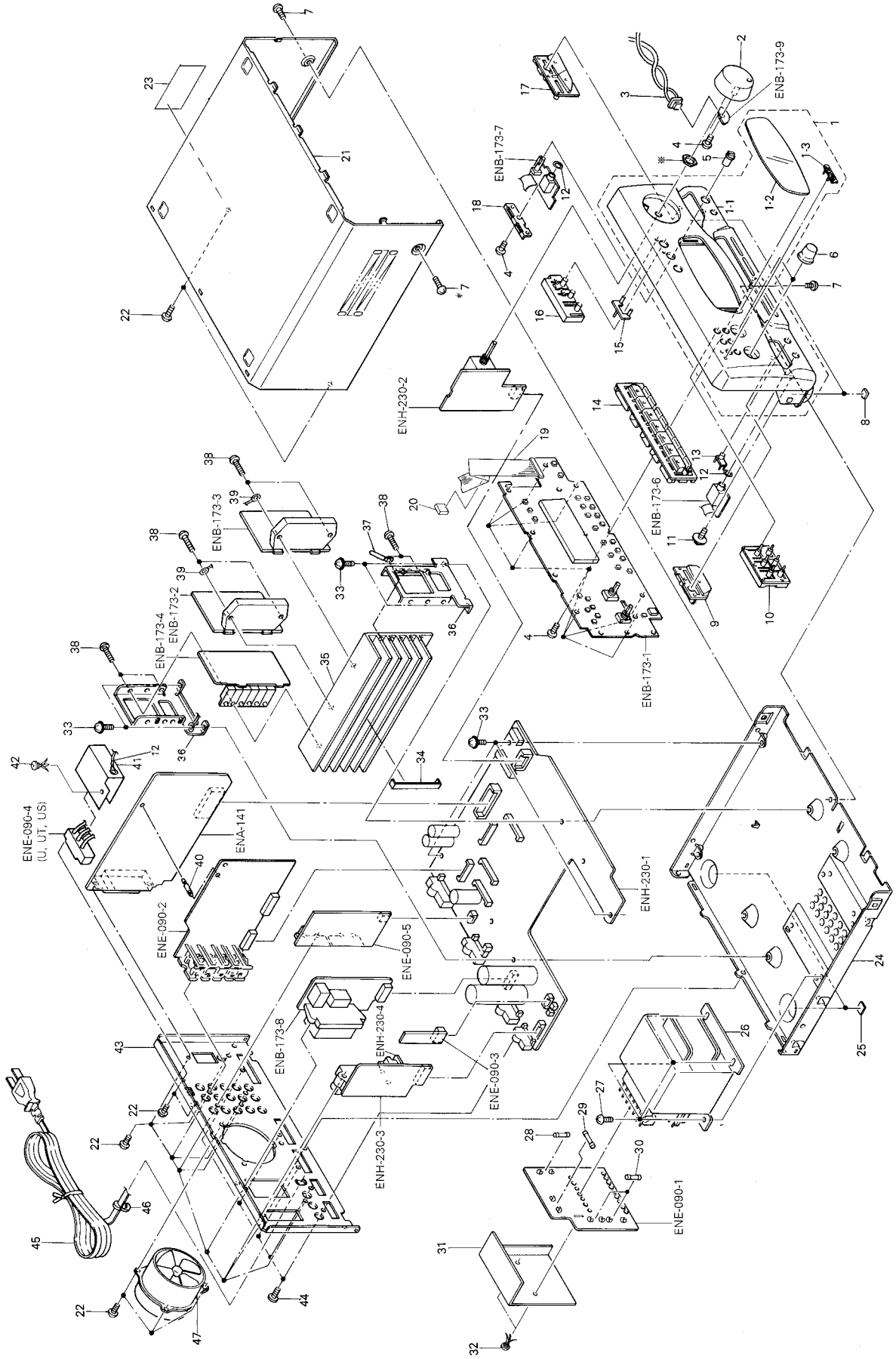
PARTS LIST

Note : All printed circuit boards and its assemblies are not available as service parts.

Contents

General Exploded View and Parts List 2-2
Printed Circuit Board Ass'y and Parts List 2-6
■ ENB-173 ☐ Front , Speaker & Amplifier PC Board Ass'y 2-6
■ ENH-230 ☐ Main & Volume PC Board Ass'y 2-10
■ ENA-141 ☐ Tuner PC Board Ass'y 2-13
■ ENE-090 ☐ Source Selector & Power Supply PC Board Ass'y 2-16
Accessories List 2-19
Packing Materials and Part Numbers 2-20

General Exploded View and Parts List



■ Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RXMXG9BKE(S	FRONT PANEL ASSY	1		
	1-1	E102622-009	FRONT PANEL	1		A
		E102622-008	FRONT PANEL	1		BS
		E102622-008	FRONT PANEL	1		EF
		E102622-008	FRONT PANEL	1		EN
		E102622-008	FRONT PANEL	1		G
		E102622-008	FRONT PANEL	1		GI
		E102622-009	FRONT PANEL	1		U
		E102622-009	FRONT PANEL	1		US
		E102622-009	FRONT PANEL	1		UT
	1-2	E308184-001	WINDOW SCREEN	1		
	1-3	E406971-221	JVC MARK	1		
	2	E308187-002	VOLUME KNOB	1		
	3	EWS142-033	SOCKET WIRE	1	AW990	
	4	SDSF2608Z	SCREW	10		
	5	E407233-001	KNOB	1		
	6	E308189-002	KNOB	2		
	7	SDSG3006M	SCREW	3		
	8	E406855-008	SPACER	1	FRONT FOOT	
	9	E207583-001	PUSH BUTTON ASSY	1		
	10	E207579-001	PUSH BUTTON	1		
	11	E407098-001	SPECIAL SCREW	1		
	12	EWT021-031	TERMINAL WIRE	1		U
		EWT021-031	TERMINAL WIRE	1		US
		EWT021-031	TERMINAL WIRE	1		UT
	13	E407232-001	REMOTE LENS	1		
	14	E207580-006	PUSH BUTTON ASSY	1		
	15	E407228-001	INDICATOR	1		
	16	E207578-001	PUSH BUTTON	1		
	17	E207586-002	PUSH BUTTON ASSY	1		
	18	E407234-001	BRACKET	1		
	19	EWR127K-14TT	FLAT WIRE	1	FC901	
	20	E3400-431	SPACER	1		
	21	E207591-001	METAL COVER	1		
	22	E73273-003	SPECIAL SCREW	26		
		E73273-003	SPECIAL SCREW	2		U
		E73273-003	SPECIAL SCREW	2		US
		E73273-003	SPECIAL SCREW	2		UT
	23	E308522-034	RATING LABEL	2		UT
	24	E102624-001	CHASSIS BASE	1		
	25	E406855-005	SPACER	1	REAR FOOT	
⚠	26	ETP1150-49EA	POWER TRANSFORMER	1		A
⚠		ETP1150-49EA	POWER TRANSFORMER	1		EF
⚠		ETP1150-49EA	POWER TRANSFORMER	1		EN
⚠		ETP1150-49EA	POWER TRANSFORMER	1		G
⚠		ETP1150-49EA	POWER TRANSFORMER	1		GI
⚠		ETP1150-49EABS	POWER TRANSFORMER	1		BS
⚠		ETP1150-49FA	POWER TRANSFORMER	1		U
⚠		ETP1150-49FA	POWER TRANSFORMER	1		US
⚠		ETP1150-49FA	POWER TRANSFORMER	1		UT
	27	E65389-004	SPECIAL SCREW	4		
⚠	28	QMF51A2-1R25S	FUSE	1	F001 (T1.25A/250V)	A
⚠		QMF51A2-1R25S	FUSE	1	F001 (T1.25A/250V)	EF
⚠		QMF51A2-1R25S	FUSE	1	F001 (T1.25A/250V)	EN
⚠		QMF51A2-1R25S	FUSE	1	F001 (T1.25A/250V)	G

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
⚠		QMF51A2-1R25S	FUSE	1	F001 (T1.25A/250V)	GI
⚠		QMF51A2-2R5S	FUSE	1	F001 (T2.5A/250V)	U
⚠		QMF51A2-2R5S	FUSE	1	F001 (T2.5A/250V)	US
⚠		QMF51A2-2R5S	FUSE	1	F001 (T2.5A/250V)	UT
⚠		QMF51E2-1R25SBS	FUSE	1	F001 (T1.25A/250V)	BS
⚠	29	QMF51A2-1R25S	FUSE	1	F002 (T1.25A/250V)	U
⚠		QMF51A2-1R25S	FUSE	1	F002 (T1.25A/250V)	US
⚠		QMF51A2-1R25S	FUSE	1	F002 (T1.25A/250V)	UT
⚠	30	QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	A
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	EF
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	EN
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	G
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	GI
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	U
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	US
⚠		QMF51A2-2R0S	FUSE	1	F101,F102 (T2.0A/250V)	UT
⚠		QMF51E2-2R0SBS	FUSE	1	F101,F102 (T2.0A/250V)	BS
	31	E308520-002	PROTECT COVER	1		
	32	E48729-008	PLASTIC RIVET	2		
	33	GBSG3008CC	SCREW	7		
	34	EXO090008H05S	SPACER	1		
	35	E308190-003	HEAT SINK	1		
	36	E308191-002	HEAT SINK BRACKET	1		
	37	E72018-001	WIRE CLAMP	1		
	38	SBSG3014CC	SCREW	8		
	39	EWT051-006K	TERMINAL WIRE	1		
	40	E308544-001	FASTENER	1		
	41	E308810-001	PROTECT COVER	1		U
		E308810-001	PROTECT COVER	1		US
		E308810-001	PROTECT COVER	1		UT
	42	E48729-009	PLASTIC RIVET	1		U
		E48729-009	PLASTIC RIVET	1		US
		E48729-009	PLASTIC RIVET	1		UT
	43	E207589-004	REAR PANEL	1		U
		E207589-004	REAR PANEL	1		US
		E207589-004	REAR PANEL	1		UT
		E207589-005	REAR PANEL	1		EF
		E207589-005	REAR PANEL	1		EN
		E207589-005	REAR PANEL	1		G
		E207589-005	REAR PANEL	1		GI
		E207589-006	REAR PANEL	1		A
		E207589-006	REAR PANEL	1		BS
	44	SBSG3006CC	SCREW	5		
⚠	45	QMP25F0-244	POWER CORD	1		A
⚠		QMP3900-200	POWER CORD	1		EF
⚠		QMP3900-200	POWER CORD	1		EN
⚠		QMP3900-200	POWER CORD	1		US
⚠		QMP39A0-200	POWER CORD	1		G
⚠		QMP39A0-200	POWER CORD	1		GI
⚠		QMP5530-0085BS	POWER CORD	1		BS
⚠		QMP7520-200	POWER CORD	1		U
⚠		QMP7520-200	POWER CORD	1		UT
⚠	46	QHS3876-162	CORD STOPPER	1		A
⚠		QHS3876-162	CORD STOPPER	1		EF
⚠		QHS3876-162	CORD STOPPER	1		EN

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
⚠		QHS3876-162	CORD STOPPER	1		G
⚠		QHS3876-162	CORD STOPPER	1		GI
⚠		QHS3876-162	CORD STOPPER	1		U
⚠		QHS3876-162	CORD STOPPER	1		US
⚠		QHS3876-162	CORD STOPPER	1		UT
⚠		QHS3876-162BS	CORD STOPPER	1		BS
	47	E206880-003	FAN ASSY	1		
	—	E61029-011	NUMBER LABEL	1		
	—	QZL1031-101	SEV LABEL	1		EF
	—	E70027-001	APRROVAL LABEL	1		EN
	—	E407619-020	FTZ LABEL	1		G
	—	E75040-035	GI LABEL	1		GI

⚠ SAFETY PARTS

The Marks for Designated Areas

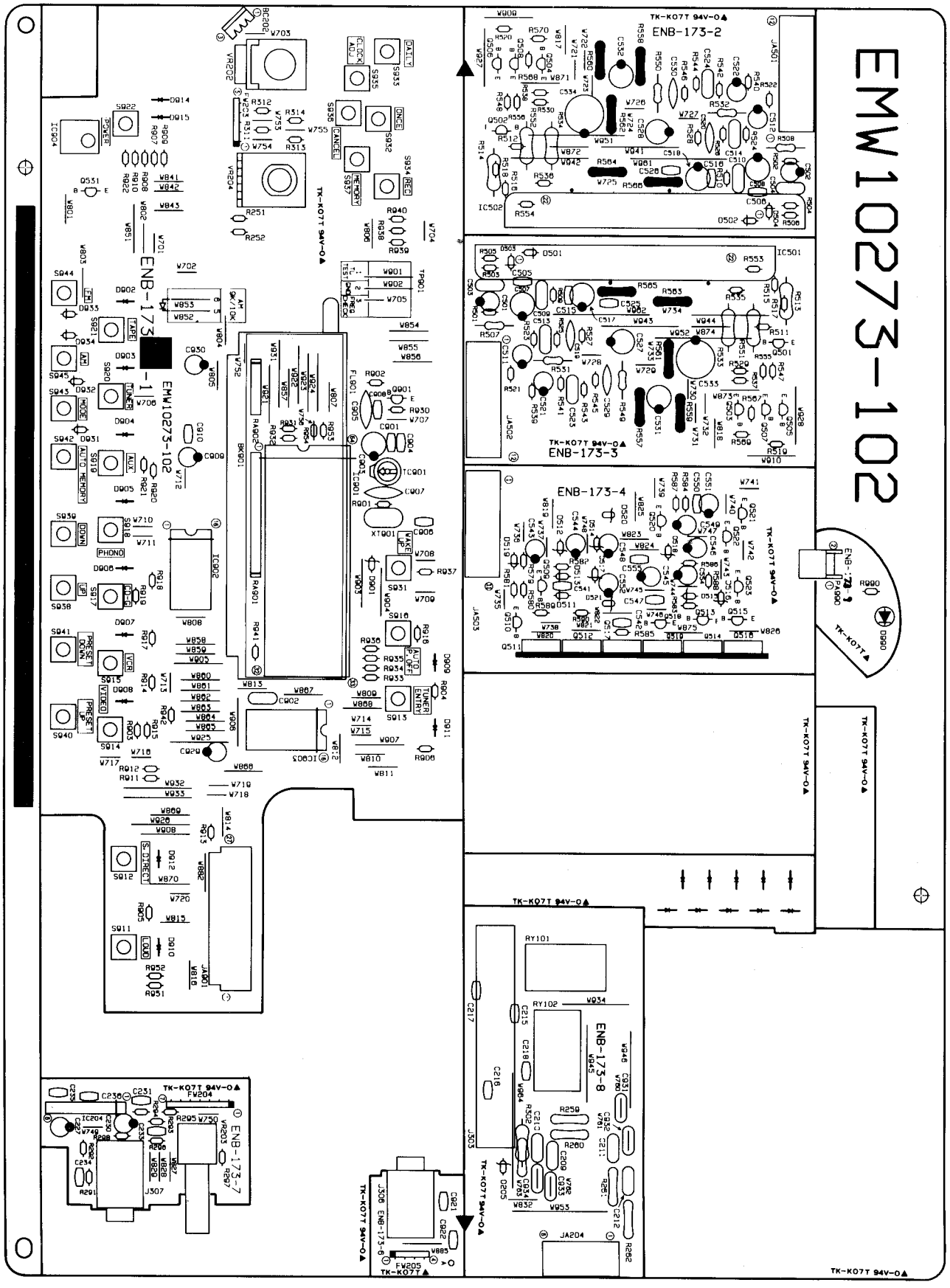
A	Australia	EN	Scandinavia	EF	Continental Europe
BS	the U.K.	G	Germany	GI	Itary
US	Singapore	UT	Taiwan	U	Universal Type

No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ENB-173☐ Front , Speaker & Amplifier PC Board Ass'y

Note : ENB-173 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
ENB-173 [C]	US UT U	Singapore Taiwan Universal Type
ENB-173 [D]	A	Australia
ENB-173 [E]	EN EF	Scandinavia Continental Europe
ENB-173 [F]	BS	the U.K.
ENB-173 [G]	G	Germany
ENB-173 [H]	GI	Italy

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION*		AREA
	Q501	2SA933S(R,S)	SILICON		
	Q502	2SA933S(R,S)	SILICON		
	Q503	2SA933S(R,S)	SILICON		
	Q504	2SA933S(R,S)	SILICON		
	Q505	2SA933S(R,S)	SILICON		
	Q506	2SA933S(R,S)	SILICON		
	Q507	DTC144ES	SILICON	ROHM	
	Q508	DTC144ES	SILICON	ROHM	
	Q509	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q510	2SA933S(R,S)	SILICON		
	Q511	2SB1187(E,F)	SILICON		
	Q512	2SB1187(E,F)	SILICON		
	Q513	2SA933S(R,S)	SILICON		
	Q514	2SB1187(E,F)	SILICON		
	Q515	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q516	2SD2061(F,G)	SILICON	ROHM	
	Q517	2SD2061(F,G)	SILICON	ROHM	
	Q518	2SA933S(R,S)	SILICON		
	Q519	2SB1187(E,F)	SILICON		
	Q520	DTA144ES	SILICON	ROHM	
	Q521	DTC144ES	SILICON	ROHM	
	Q522	DTA144ES	SILICON	ROHM	
	Q523	DTC144ES	SILICON	ROHM	
	Q531	DTC114YS	SILICON	ROHM	
	Q901	DTA114YS	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC204	BA15218N	I.C.	ROHM	
	IC501	STK400-040	I.C.	SANYO	
	IC502	STK400-040	I.C.	SANYO	
	IC901	HD614089SD57	I.C.	HITACHI	
	IC902	TC74HC595AP	I.C.	TOSHIBA	
	IC903	TC74HC595AP	I.C.	TOSHIBA	
	IC904	GP1U901X	I.C.	SHARP	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D205	MTZ24JC	ZENER	ROHM	
	D501	1SS119	SILICON	HITACHI	
	D502	1SS119	SILICON	HITACHI	
	D503	1SS119	SILICON	HITACHI	
	D504	1SS119	SILICON	HITACHI	
	D511	1SS119	SILICON	HITACHI	
	D512	MTZ10JC	ZENER	ROHM	
	D513	1SS119	SILICON	HITACHI	
	D514	MTZ11JC	ZENER	ROHM	
	D515	RD13JSB3	ZENER	NEC	
	D516	MTZ13JC	ZENER	ROHM	
	D517	MTZ6.2JC	ZENER	ROHM	
	D518	MTZ11JC	ZENER	ROHM	
	D519	1SS119	SILICON	HITACHI	
	D520	MTZ13JC	ZENER	ROHM	
	D521	MTZ7.5JC	ZENER	ROHM	
	D901	MTZ5.6JC	ZENER	ROHM	
	D902	SLR-342VC3F	L.E.D.	ROHM	
	D903	SLR-342VC3F	L.E.D.	ROHM	
	D904	SLR-342VC3F	L.E.D.	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D905	SLR-342VC3F	L.E.D.	ROHM	
	D906	SLR-342VC3F	L.E.D.	ROHM	
	D907	SLR-342VC3F	L.E.D.	ROHM	
	D908	SLR-342VC3F	L.E.D.	ROHM	
	D909	SLR-342VC3F	L.E.D.	ROHM	
	D910	SLR-342VC3F	L.E.D.	ROHM	
	D911	SLR-342MCA47	L.E.D.	ROHM	
	D912	SLR-342VC3F	L.E.D.	ROHM	
	D914	SLR-342VC3F	L.E.D.	ROHM	
	D915	SLR-342VC3F	L.E.D.	ROHM	
	D931	1SS119	SILICON	HITACHI	U
	D931	1SS119	SILICON	HITACHI	US
	D931	1SS119	SILICON	HITACHI	UT
	D933	1SS119	SILICON	HITACHI	A
	D933	1SS119	SILICON	HITACHI	U
	D933	1SS119	SILICON	HITACHI	US
	D933	1SS119	SILICON	HITACHI	UT
	D934	1SS119	SILICON	HITACHI	GI
	D990	LN282RPX	L.E.D.		

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C209	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C210	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C211	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C212	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C215	QCBB1HK-331	330PF	50V	CERAMIC	G
	C215	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C216	QCBB1HK-331	330PF	50V	CERAMIC	G
	C216	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C217	QCBB1HK-331	330PF	50V	CERAMIC	G
	C217	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C218	QCBB1HK-331	330PF	50V	CERAMIC	G
	C218	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C227	QER41CM-106	10MF	16V	ELECTRO	
	C230	QER41CM-106	10MF	16V	ELECTRO	
	C231	QCBB1HK-101	100PF	50V	CERAMIC	
	C233	QCBB1HK-101	100PF	50V	CERAMIC	
	C234	QCGB1HK-102	1000PF	50V	CERAMIC	
	C235	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C236	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C501	EEZ5009-106	10MF		ELECTRO	
	C502	EEZ5009-106	10MF		ELECTRO	
	C503	QFN81HJ-392	3900PF	50V	MYLAR	
	C504	QFN81HJ-392	3900PF	50V	MYLAR	
	C505	QCBB1HK-101	100PF	50V	CERAMIC	
	C506	QCBB1HK-101	100PF	50V	CERAMIC	
	C507	EEZ5009-106	10MF		ELECTRO	
	C508	EEZ5009-106	10MF		ELECTRO	
	C509	QFN81HJ-333	0.033MF	50V	MYLAR	
	C510	QFN81HJ-333	0.033MF	50V	MYLAR	
	C511	EEZ5009-106	10MF		ELECTRO	
	C512	EEZ5009-106	10MF		ELECTRO	
	C513	QFLB1HJ-101	100PF	50V	MYLAR	
	C514	QFLB1HJ-101	100PF	50V	MYLAR	
	C515	QCBB1HK-101	100PF	50V	CERAMIC	
	C516	QCBB1HK-101	100PF	50V	CERAMIC	
	C517	EEZ5009-106	10MF		ELECTRO	
	C518	EEZ5009-106	10MF		ELECTRO	
	C519	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C520	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C521	EEZ5009-106	10MF		ELECTRO	
	C522	EEZ5009-106	10MF		ELECTRO	
	C523	QFLB1HJ-101	100PF	50V	MYLAR	
	C524	QFLB1HJ-101	100PF	50V	MYLAR	
	C525	QCBB1HK-101	100PF	50V	CERAMIC	
	C526	QCBB1HK-101	100PF	50V	CERAMIC	
	C527	EEZ5009-475	4.7MF		ELECTRO	
	C528	EEZ5009-475	4.7MF		ELECTRO	
	C529	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C530	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C531	QETB1VM-227M	220MF	35V	ELECTRO	
	C532	QETB1VM-227M	220MF	35V	ELECTRO	
	C533	QETB1VM-477EE	470MF	35V	ELECTRO	
	C534	QETB1VM-477EE	470MF	35V	ELECTRO	
	C541	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C542	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C543	QET41EM-106	10MF	25V	ELECTRO	
	C544	QET41AM-477	470MF	10V	ELECTRO	
	C545	QET41CM-226	22MF	16V	ELECTRO	
	C546	QET41CM-226	22MF	16V	ELECTRO	
	C547	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C548	QET41CM-226	22MF	16V	ELECTRO	
	C549	QET41CM-226	22MF	16V	ELECTRO	
	C550	QCVB1CM-103	0.01MF	16V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C551	QET41CM-476	47MF	16V	ELECTRO	
	C552	QET41AM-476	47MF	10V	ELECTRO	
	C554	QET41CM-226	22MF	16V	ELECTRO	
	C555	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C901	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C902	QCZ0202-155	1.5MF	25V	CERAMIC	
	C903	QET41AM-227	220MF	10V	ELECTRO	
	C904	QCGB1HK-102	1000PF	50V	CERAMIC	
	C905	QCF11HP-103	0.01MF	50V	CERAMIC	
	C906	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C907	QCT26CH-120	12PF	50V	CERAMIC	
	C909	QEK51HM-105G	1MF	50V	ELECTRO	
	C910	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C921	QCBB1HK-471	470PF	50V	CERAMIC	G
	C921	QCBB1HK-471	470PF	50V	CERAMIC	GI
	C922	QCBB1HK-471	470PF	50V	CERAMIC	G
	C922	QCBB1HK-471	470PF	50V	CERAMIC	GI
	C929	QER51HM-475	4.7MF	50V	ELECTRO	
	C930	QER51HM-475	4.7MF	50V	ELECTRO	*
	C930	QET41HM-475	4.7MF	50V	ELECTRO	
	C931	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C932	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C933	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C934	QFVB1HJ-224N	0.22MF	50V	T.FILM	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R251	QRD167J-821	820	1/6W	CARBON	
	R252	QRD167J-821	820	1/6W	CARBON	
	R259	QRD148J-100	10	1/4W	CARBON	
	R260	QRD148J-100	10	1/4W	CARBON	
	R261	QRD148J-100	10	1/4W	CARBON	
	R262	QRD148J-100	10	1/4W	CARBON	
	R291	QRD167J-102	1K	1/6W	CARBON	
	R292	QRD167J-103	10K	1/6W	CARBON	
	R293	QRD167J-104	100K	1/6W	CARBON	
	R294	QRD167J-331	330	1/6W	CARBON	
	R295	QRD167J-681	680	1/6W	CARBON	
	R296	QRD167J-104	100K	1/6W	CARBON	
	R297	QRD167J-562	5.6K	1/6W	CARBON	
	R298	QRD167J-562	5.6K	1/6W	CARBON	
	R302	QRD148J-100	10	1/4W	CARBON	
	R501	QRD167J-104	100K	1/6W	CARBON	
	R502	QRD167J-104	100K	1/6W	CARBON	
	R503	QRD167J-102	1K	1/6W	CARBON	
	R504	QRD167J-102	1K	1/6W	CARBON	
	R505	QRD167J-104	100K	1/6W	CARBON	
	R506	QRD167J-104	100K	1/6W	CARBON	
	R507	ERD141J-821S	820	1/4W	CARBON	
	R508	ERD141J-821S	820	1/4W	CARBON	
	R509	QRD167J-473	47K	1/6W	CARBON	
	R510	QRD167J-473	47K	1/6W	CARBON	
	R511	QRD167J-473	47K	1/6W	CARBON	
	R512	QRD167J-473	47K	1/6W	CARBON	
⚠	R513	QRX012J-R22AM	0.22	1W	M.FILM	
⚠	R514	QRX012J-R22AM	0.22	1W	M.FILM	
	R515	QRD167J-223	22K	1/6W	CARBON	
	R516	QRD167J-223	22K	1/6W	CARBON	
	R517	QRD167J-223	22K	1/6W	CARBON	
	R518	QRD167J-223	22K	1/6W	CARBON	
	R519	QRD167J-103	10K	1/6W	CARBON	
	R520	QRD167J-103	10K	1/6W	CARBON	
	R521	QRD167J-104	100K	1/6W	CARBON	
	R522	QRD167J-104	100K	1/6W	CARBON	
	R523	QRD167J-102	1K	1/6W	CARBON	
	R524	QRD167J-102	1K	1/6W	CARBON	
	R525	QRD167J-104	100K	1/6W	CARBON	
	R526	QRD167J-104	100K	1/6W	CARBON	
	R527	QRD167J-104	100K	1/6W	CARBON	
	R528	QRD167J-104	100K	1/6W	CARBON	
	R529	QRD167J-102	1K	1/6W	CARBON	
	R530	QRD167J-102	1K	1/6W	CARBON	
	R531	ERD141J-102S	1K	1/4W	CARBON	
	R532	ERD141J-102S	1K	1/4W	CARBON	
⚠	R533	QRX012J-R22AM	0.22	1W	M.FILM	
⚠	R534	QRX012J-R22AM	0.22	1W	M.FILM	
	R535	QRD167J-223	22K	1/6W	CARBON	
	R536	QRD167J-223	22K	1/6W	CARBON	
	R537	QRD167J-223	22K	1/6W	CARBON	
	R538	QRD167J-223	22K	1/6W	CARBON	
	R539	QRD167J-104	100K	1/6W	CARBON	
	R540	QRD167J-104	100K	1/6W	CARBON	
	R541	QRD167J-102	1K	1/6W	CARBON	
	R542	QRD167J-102	1K	1/6W	CARBON	
	R543	QRD167J-104	100K	1/6W	CARBON	
	R544	QRD167J-104	100K	1/6W	CARBON	
	R545	QRD167J-104	100K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R546	QRD167J-104	100K	1/6W	CARBON	
	R547	QRD167J-102	1K	1/6W	CARBON	
	R548	QRD167J-102	1K	1/6W	CARBON	
	R549	ERD141J-102S	1K	1/4W	CARBON	
	R550	ERD141J-102S	1K	1/4W	CARBON	
⚠	R551	QRX012J-R22AM	0.22	1W	M.FILM	
⚠	R552	QRX012J-R22AM	0.22	1W	M.FILM	
	R553	QRD167J-223	22K	1/6W	CARBON	
	R554	QRD167J-223	22K	1/6W	CARBON	
	R555	QRD167J-223	22K	1/6W	CARBON	
	R556	QRD167J-223	22K	1/6W	CARBON	
⚠	R557	QRZ0077-101	100	1/4W	FUSIBLE	
⚠	R558	QRZ0077-101	100	1/4W	FUSIBLE	
⚠	R559	QRZ0077-101	100	1/4W	FUSIBLE	
⚠	R560	QRZ0077-101	100	1/4W	FUSIBLE	
⚠	R561	QRZ0077-470	47	1/4W	FUSIBLE	
⚠	R562	QRZ0077-470	47	1/4W	FUSIBLE	
⚠	R563	QRZ0077-470	47	1/4W	FUSIBLE	
⚠	R564	QRZ0077-470	47	1/4W	FUSIBLE	
⚠	R565	QRZ0077-100	10	1/4W	FUSIBLE	
⚠	R566	QRZ0077-100	10	1/4W	FUSIBLE	
	R567	QRD167J-103	10K	1/6W	CARBON	
	R568	QRD167J-103	10K	1/6W	CARBON	
	R569	QRD167J-103	10K	1/6W	CARBON	
	R570	QRD167J-103	10K	1/6W	CARBON	
	R579	QRD167J-103	10K	1/6W	CARBON	
	R580	QRD167J-332	3.3K	1/6W	CARBON	
	R581	QRD167J-332	3.3K	1/6W	CARBON	
	R582	QRD167J-472	4.7K	1/6W	CARBON	
	R583	QRD167J-222	2.2K	1/6W	CARBON	
	R584	QRD167J-332	3.3K	1/6W	CARBON	
	R585	QRD167J-392	3.9K	1/6W	CARBON	
	R586	QRD167J-222	2.2K	1/6W	CARBON	
	R587	QRD167J-472	4.7K	1/6W	CARBON	
	R588	QRD167J-153	15K	1/6W	CARBON	
	R589	QRD161J-100	10	1/6W	CARBON	
	R590	QRD161J-100	10	1/6W	CARBON	
	R901	QRD167J-473	47K	1/6W	CARBON	
	R902	QRD167J-104	100K	1/6W	CARBON	
	R903	QRD167J-821	820	1/6W	CARBON	
	R904	QRD167J-561	560	1/6W	CARBON	
	R905	QRD167J-471	470	1/6W	CARBON	
	R906	QRD167J-391	390	1/6W	CARBON	
	R908	QRD167J-331	330	1/6W	CARBON	A
	R908	QRD167J-201	200	1/6W	CARBON	BS
	R908	QRD167J-331	330	1/6W	CARBON	EF
	R908	QRD167J-331	330	1/6W	CARBON	EN
	R908	QRD167J-331	330	1/6W	CARBON	G
	R908	QRD167J-331	330	1/6W	CARBON	GI
	R908	QRD167J-331	330	1/6W	CARBON	U
	R908	QRD167J-331	330	1/6W	CARBON	US
	R908	QRD167J-331	330	1/6W	CARBON	UT
	R909	QRD167J-331	330	1/6W	CARBON	A
	R909	QRD167J-201	200	1/6W	CARBON	BS
	R909	QRD167J-331	330	1/6W	CARBON	EF
	R909	QRD167J-331	330	1/6W	CARBON	EN
	R909	QRD167J-331	330	1/6W	CARBON	G
	R909	QRD167J-331	330	1/6W	CARBON	GI
	R909	QRD167J-331	330	1/6W	CARBON	U
	R909	QRD167J-331	330	1/6W	CARBON	US
	R909	QRD167J-331	330	1/6W	CARBON	UT
	R911	QRD167J-103	10K	1/6W	CARBON	
	R912	QRD167J-103	10K	1/6W	CARBON	
	R913	QRD167J-103	10K	1/6W	CARBON	
	R914	QRD161J-272	2.7K	1/6W	CARBON	
	R915	QRD161J-272	2.7K	1/6W	CARBON	
	R916	QRD161J-272	2.7K	1/6W	CARBON	
	R917	QRD167J-432	4.3K	1/6W	CARBON	
	R918	QRD167J-432	4.3K	1/6W	CARBON	
	R919	QRD167J-822	8.2K	1/6W	CARBON	
	R920	QRD167J-822	8.2K	1/6W	CARBON	
	R921	QRD167J-243	24K	1/6W	CARBON	
	R922	QRD167J-243	24K	1/6W	CARBON	
	R937	QRD167J-103	10K	1/6W	CARBON	
	R938	QRD167J-103	10K	1/6W	CARBON	
	R939	QRD167J-103	10K	1/6W	CARBON	
	R940	QRD167J-103	10K	1/6W	CARBON	
	R941	QRD167J-104	100K	1/6W	CARBON	
	R942	QRD167J-223	22K	1/6W	CARBON	
	R951	QRD167J-300	30	1/6W	CARBON	
	R952	QRD167J-300	30	1/6W	CARBON	
	R953	QRD167J-300	30	1/6W	CARBON	
	R954	QRD167J-300	30	1/6W	CARBON	
	R990	QRD167J-392	3.9K	1/6W	CARBON	
	VR202	QVGA81W-E15D	100K		VARIABLE	
	VR203	QVAB80B-E54C	50K		VARIABLE	
	VR204	QVJB81A-E53C	5K		VARIABLE	

⚠ : SAFETY PARTS

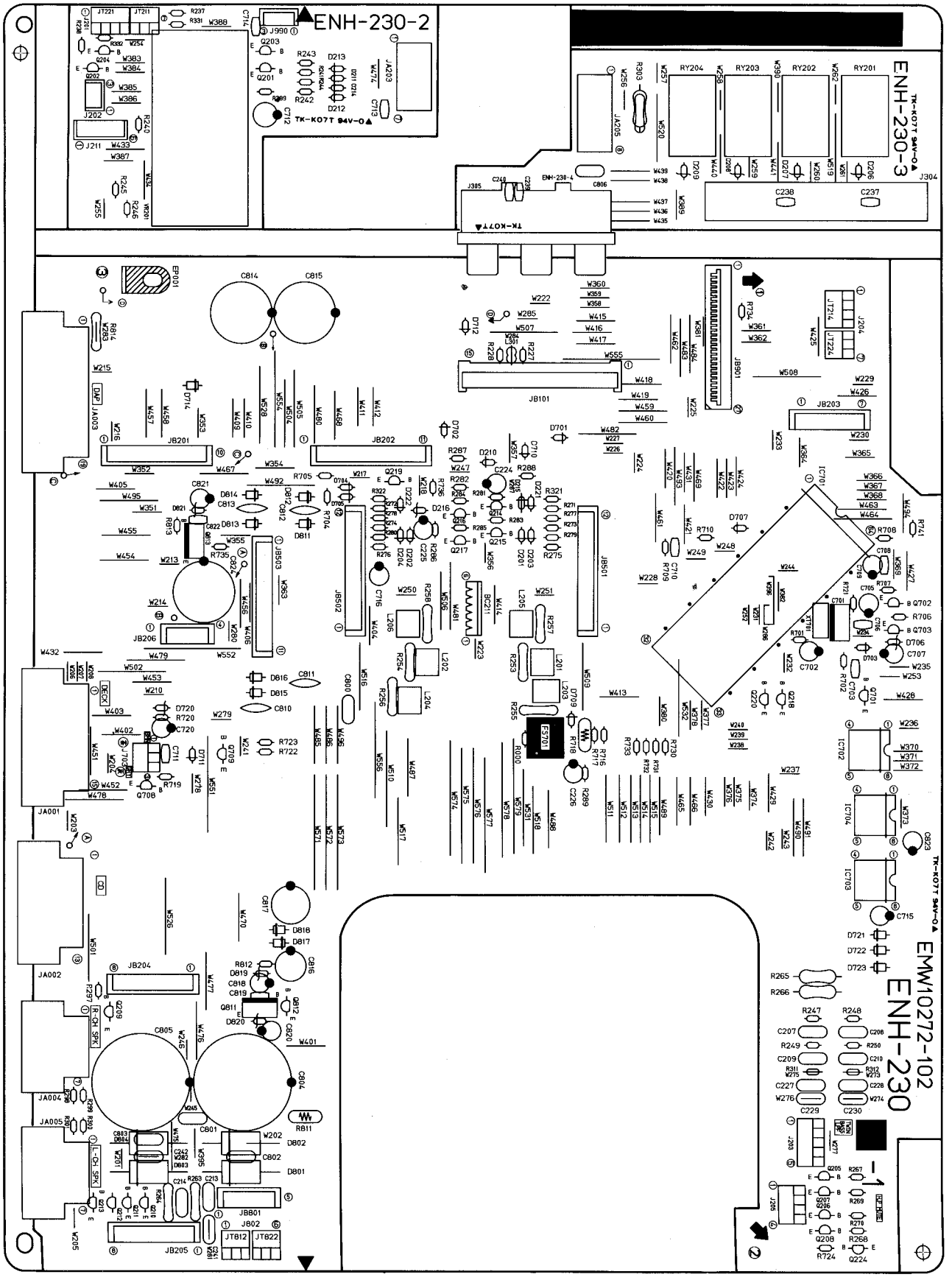
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	J303	EMB90TV-804A	SPEAKER TERMINAL	
	J306	QMS3L40-EDOH	MINI JACK	
	J307	QMS3L40-EDOH	MINI JACK	
	S911	ESP0001-023M	TACT SWITCH(AUTO LOUDNESS)	
	S912	ESP0001-023M	TACT SWITCH(SOURCE DIRECT)	
	S913	ESP0001-023M	TACT SWITCH(TUNER ENTRY)	
	S914	ESP0001-023M	TACT SWITCH(VIDEO)	
	S915	ESP0001-023M	TACT SWITCH(VCR)	
	S916	ESP0001-023M	TACT SWITCH(AUTO POWER OFF)	
	S917	ESP0001-023M	TACT SWITCH(CD/CDG)	
	S918	ESP0001-023M	TACT SWITCH(PHONO)	
	S919	ESP0001-023M	TACT SWITCH(AUX)	
	S920	ESP0001-023M	TACT SWITCH(TUNER)	
	S921	ESP0001-023M	TACT SWITCH(TAPE)	
	S922	ESP0001-023M	TACT SWITCH(POWER)	
	S931	ESP0001-023M	TACT SWITCH(WAKE UP/SLEEP)	
	S932	ESP0001-023M	TACT SWITCH(ONCE TIMER)	
	S933	ESP0001-023M	TACT SWITCH(DAILY TIMER)	
	S934	ESP0001-023M	TACT SWITCH(REC TIMER)	
	S935	ESP0001-023M	TACT SWITCH(CLOCK ADJ)	
	S936	ESP0001-023M	TACT SWITCH(CANCEL)	
	S937	ESP0001-023M	TACT SWITCH(MEMORY)	
	S938	ESP0001-023M	TACT SWITCH(UP)	
	S939	ESP0001-023M	TACT SWITCH(DOWN)	
	S940	ESP0001-023M	TACT SWITCH(PRESET UP)	
	S941	ESP0001-023M	TACT SWITCH(PRESET DOWN)	
	S942	ESP0001-023M	TACT SWITCH(PRESET SCAN)	
	S943	ESP0001-023M	TACT SWITCH(AUTO/MONO)	
	S944	ESP0001-023M	TACT SWITCH(FM)	
	S945	ESP0001-023M	TACT SWITCH(AM)	
	BC202	EWS293-0132	SOCKET WIRE(3PIN)	
	BK901	E308192-001	FL HOLDER	
	FL901	ELU0001-139	FL TUBE	
	FS901	E306805-014	FELT SPACER	
	FW203	EWR35B-10LST	FLAT WIRE(5PIN)	
	FW204	EWR37B-08LST	FLAT WIRE(7PIN)	
	FW205	EWR34B-10LST	FLAT WIRE(4PIN)	
	JA204	EMV7125-008R	CONNECTOR(8PIN)	
	JA501	EMV7125-012R	CONNECTOR(12PIN)	
	JA502	EMV7125-012R	CONNECTOR(12PIN)	
	JA503	EMV7125-011R	CONNECTOR(11PIN)	
	JA901	EMV7123-027R	CONNECTOR(27PIN)	
	PA990	EMV5103-002B	PLUG ASSY(2PIN)	
	RY101	ESK8D24-212	RELAY	
	RY102	ESK8D24-212	RELAY	
	TC901	ENZ1003-015	TRIMMER	
	XT901	ECX4194-304CF	RESONATOR	

⚠ : SAFETY PARTS

■ENH-230 □ Main & Volume PC Board Ass'y

Note : ENH-230 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
ENH-230 [A]	US UT U	Singapore Taiwan Universal Type
ENH-230 [B]	A BS EN EF	Australia the U.K. Scandinavia Continental Europe
ENH-230 [C]	G GI	Germany Italy

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q201	2SD2144S(VW)	SILICON	ROHM	
	Q202	2SD2144S(VW)	SILICON	ROHM	
	Q203	2SD2144S(VW)	SILICON	ROHM	
	Q204	2SD2144S(VW)	SILICON	ROHM	
	Q205	2SD2144S(VW)	SILICON	ROHM	
	Q206	2SD2144S(VW)	SILICON	ROHM	
	Q207	2SD2144S(VW)	SILICON	ROHM	
	Q208	2SD2144S(VW)	SILICON	ROHM	
	Q209	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q210	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q211	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q212	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q213	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q214	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q215	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q216	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q217	2SA733A(P,Q)	SILICON		
	Q218	DTA144ES	SILICON	ROHM	
	Q219	DTA114ES	SILICON	ROHM	
	Q220	DTC144ES	SILICON	ROHM	
	Q221	2SD2144S(VW)	SILICON	ROHM	
	Q222	2SD2144S(VW)	SILICON	ROHM	
	Q223	DTA144ES	SILICON	ROHM	
	Q224	DTA114TS	SILICON	ROHM	
	Q701	DTC114WS	SILICON		
	Q702	DTC114YS	SILICON	ROHM	
	Q703	DTC144ES	SILICON	ROHM	
	Q708	2SD2144S(VW)	SILICON	ROHM	
	Q709	DTA123ES	SILICON	ROHM	
	Q811	2SB1357(E,F)	SILICON	ROHM	
	Q812	2SC3311A(Q,R)	SILICON	MATSUSHITA	
	Q813	2SD2037(E,F)	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC701	UPD78011CW-011	I.C.	NEC	
	IC702	LB1639-CV	I.C.	SANYO	
	IC703	LB1639-CV	I.C.	SANYO	
	IC704	LB1639-CV	I.C.	SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D201	1SS119	SILICON	HITACHI	
	D202	1SS119	SILICON	HITACHI	
	D203	1SS119	SILICON	HITACHI	
	D204	1SS119	SILICON	HITACHI	
	D206	MTZ24JC	ZENER	ROHM	
	D207	MTZ24JC	ZENER	ROHM	
	D208	MTZ24JC	ZENER	ROHM	
	D209	MTZ24JC	ZENER	ROHM	
	D210	1SS119	SILICON	HITACHI	
	D211	1SS119	SILICON	HITACHI	
	D212	1SS119	SILICON	HITACHI	
	D213	1SS119	SILICON	HITACHI	
	D214	1SS119	SILICON	HITACHI	
	D215	1SS119	SILICON	HITACHI	
	D216	MTZ2.0JB	ZENER	ROHM	
	D221	1SS119	SILICON	HITACHI	
	D222	1SS119	SILICON	HITACHI	
	D701	1SS119	SILICON	HITACHI	
	D702	1SS119	SILICON	HITACHI	
	D703	1SS119	SILICON	HITACHI	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D704	1SS119	SILICON	HITACHI	
	D705	1SS119	SILICON	HITACHI	
	D706	MTZ5.1JB	ZENER	ROHM	
	D707	1SS119	SILICON	HITACHI	
	D709	1SS119	SILICON	HITACHI	
	D710	1SS119	SILICON	HITACHI	
	D711	1SS119	SILICON	HITACHI	
	D712	1SS119	SILICON	HITACHI	
	D714	1SR139-200	SILICON	ROHM	
	D720	MTZ2.0JB	ZENER	ROHM	
	D721	1SR139-200	SILICON	ROHM	
	D722	1SR139-200	SILICON	ROHM	
	D723	1SR139-200	SILICON	ROHM	
⚠	D801	30DL2FC	SILICON	NIHONINTER	
⚠	D802	30DL2FC	SILICON	NIHONINTER	
⚠	D803	30DL2FC	SILICON	NIHONINTER	
⚠	D804	30DL2FC	SILICON	NIHONINTER	
	D811	1SR139-200	SILICON	ROHM	
	D812	1SR139-200	SILICON	ROHM	
	D813	1SR139-200	SILICON	ROHM	
	D814	1SR139-200	SILICON	ROHM	
	D815	1SR35-200A	SILICON	ROHM	
	D816	1SR35-200A	SILICON	ROHM	
	D817	1SR139-200	SILICON	ROHM	
	D818	1SR139-200	SILICON	ROHM	
	D819	MTZ33JC	ZENER	ROHM	
	D820	MTZ8.2JC	ZENER	ROHM	
	D821	MTZ5.6JC	ZENER	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C207	QFVB1HJ-104N	0.1MF	50V	T.FILM	
	C208	QFVB1HJ-104N	0.1MF	50V	T.FILM	
	C209	QFVB1HJ-104N	0.1MF	50V	T.FILM	
	C210	QFVB1HJ-104N	0.1MF	50V	T.FILM	
	C213	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C214	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C224	QEK51EM-106	10MF	25V	ELECTRO	
	C225	QEK41EM-476	47MF	25V	ELECTRO	
	C226	QEB41HM-334	0.33MF	50V	LLC ELECTR	O
	C237	QCBB1HK-331	330PF	50V	CERAMIC	G
	C237	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C238	QCBB1HK-331	330PF	50V	CERAMIC	G
	C238	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C239	QCBB1HK-331	330PF	50V	CERAMIC	G
	C239	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C240	QCBB1HK-331	330PF	50V	CERAMIC	G
	C240	QCBB1HK-331	330PF	50V	CERAMIC	GI
	C241	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C242	QFVB1HJ-224N	0.22MF	50V	T.FILM	
	C701	QEADOHZ-10AA			ELECTRO	
	C702	QET41AM-476	47MF	10V	ELECTRO	
	C703	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C705	QET41EM-106	10MF	25V	ELECTRO	
	C706	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C707	QETB1HM-225	2.2MF	50V	ELECTRO	
	C708	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C709	QET41EM-106	10MF	25V	ELECTRO	
	C710	QCBB1HK-471	470PF	50V	CERAMIC	
	C711	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C712	QET41CM-226	22MF	16V	ELECTRO	
	C713	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C714	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C715	QET41AM-476	47MF	10V	ELECTRO	
	C716	QET41CM-226	22MF	16V	ELECTRO	
	C720	QETBOJM-477	470MF	6.3V	ELECTRO	
	C800	QFN81HJ-103	0.01MF	50V	MYLAR	
	C801	QFV82AJ-104	0.1MF	100V	T.FILM	
	C802	QFV82AJ-104	0.1MF	100V	T.FILM	
	C803	QFV82AJ-104	0.1MF	100V	T.FILM	
	C804	EEW4208-568E	5600MF		ELECTRO	
	C805	EEW4208-568E	5600MF		ELECTRO	
	C806	QFVB1HJ-104N	0.1MF	50V	T.FILM	
	C810	QCF11HP-103	0.01MF	50V	CERAMIC	
	C811	QCF11HP-103	0.01MF	50V	CERAMIC	
	C812	QCF11HP-103	0.01MF	50V	CERAMIC	
	C813	QCF11HP-103	0.01MF	50V	CERAMIC	
	C814	EET3506-338M	3300MF		ELECTRO	
	C815	EET3506-338M	3300MF		ELECTRO	
	C816	QETB1HM-107	100MF	50V	ELECTRO	
	C817	QETB1HM-227	220MF	50V	ELECTRO	
	C818	QET41HM-226	22MF	50V	ELECTRO	
	C819	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C820	QER51HM-475	4.7MF	50V	ELECTRO	
	C821	QET41HM-226	22MF	50V	ELECTRO	
	C822	QCVB1CM-103	0.01MF	16V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C823	QET41AM-476	47MF 10V ELECTRO	
	C824	QETB1EM-338M	3300MF 25V ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R	QRD167J-561	560 1/6W CARBON	
	R227	QRD167J-152	1.5K 1/6W CARBON	
	R228	QRD167J-152	1.5K 1/6W CARBON	
	R237	QRD167J-392	3.9K 1/6W CARBON	
	R238	QRD167J-392	3.9K 1/6W CARBON	
	R239	QRD167J-123	12K 1/6W CARBON	
	R240	QRD167J-123	12K 1/6W CARBON	
	R241	QRD167J-103	10K 1/6W CARBON	
	R242	QRD167J-103	10K 1/6W CARBON	
	R243	QRD167J-103	10K 1/6W CARBON	
	R244	QRD167J-103	10K 1/6W CARBON	
	R245	QRD167J-123	12K 1/6W CARBON	
	R246	QRD167J-123	12K 1/6W CARBON	
	R247	QRD167J-153	15K 1/6W CARBON	
	R248	QRD167J-153	15K 1/6W CARBON	
	R249	QRD167J-153	15K 1/6W CARBON	
	R250	QRD167J-153	15K 1/6W CARBON	
	R253	QRD148J-100	10 1/4W CARBON	
	R254	QRD148J-100	10 1/4W CARBON	
	R255	QRD148J-100	10 1/4W CARBON	
	R256	QRD148J-100	10 1/4W CARBON	
	R257	QRD148J-100	10 1/4W CARBON	
	R258	QRD148J-100	10 1/4W CARBON	
	R263	QRD148J-100	10 1/4W CARBON	
	R264	QRD148J-100	10 1/4W CARBON	
⚠	R265	QRG012J-221AM	220 1W O.M.FILM	
⚠	R266	QRG012J-221AM	220 1W O.M.FILM	
	R267	QRD167J-473	47K 1/6W CARBON	
	R268	QRD167J-473	47K 1/6W CARBON	
	R269	QRD167J-473	47K 1/6W CARBON	
	R270	QRD167J-473	47K 1/6W CARBON	
	R271	QRD167J-104	100K 1/6W CARBON	
	R272	QRD167J-104	100K 1/6W CARBON	
	R273	QRD167J-104	100K 1/6W CARBON	
	R274	QRD167J-104	100K 1/6W CARBON	
	R275	QRD167J-104	100K 1/6W CARBON	
	R276	QRD167J-104	100K 1/6W CARBON	
	R277	QRD167J-393	39K 1/6W CARBON	
	R278	QRD167J-393	39K 1/6W CARBON	
	R279	QRD167J-393	39K 1/6W CARBON	
	R280	QRD167J-393	39K 1/6W CARBON	
	R281	QRD167J-103	10K 1/6W CARBON	
	R282	QRD167J-103	10K 1/6W CARBON	
	R283	QRD167J-103	10K 1/6W CARBON	
	R284	QRD167J-103	10K 1/6W CARBON	
	R285	QRD167J-473	47K 1/6W CARBON	
	R286	QRD167J-473	47K 1/6W CARBON	
	R287	QRD167J-104	100K 1/6W CARBON	
	R288	QRD167J-222	2.2K 1/6W CARBON	
	R289	QRD167J-682	6.8K 1/6W CARBON	
	R297	QRD167J-152	1.5K 1/6W CARBON	
	R298	QRD167J-152	1.5K 1/6W CARBON	
	R299	QRD167J-152	1.5K 1/6W CARBON	
	R300	QRD167J-152	1.5K 1/6W CARBON	
	R301	QRD167J-152	1.5K 1/6W CARBON	
	R303	QRD148J-100	10 1/4W CARBON	
	R314	QRD167J-103	10K 1/6W CARBON	
	R315	QRD167J-103	10K 1/6W CARBON	
	R321	QRD167J-393	39K 1/6W CARBON	
	R322	QRD167J-393	39K 1/6W CARBON	
	R331	QRD167J-133	13K 1/6W CARBON	
	R332	QRD167J-133	13K 1/6W CARBON	
	R701	QRD167J-470	47 1/6W CARBON	
	R702	QRD167J-223	22K 1/6W CARBON	
	R704	QRD167J-103	10K 1/6W CARBON	
	R705	QRD167J-103	10K 1/6W CARBON	
	R706	QRD167J-103	10K 1/6W CARBON	
	R707	QRD167J-102	1K 1/6W CARBON	
	R708	QRD161J-100	10 1/6W CARBON	
	R709	QRD167J-473	47K 1/6W CARBON	
	R710	QRD167J-221	220 1/6W CARBON	
	R716	QRD167J-681	680 1/6W CARBON	
	R717	QRD167J-561	560 1/6W CARBON	
	R718	PTH9M04BE471TS	POSISTER	
	R719	QRD167J-152	1.5K 1/6W CARBON	
	R720	QRD167J-200	20 1/6W CARBON	A
	R720	QRD167J-430	43 1/6W CARBON	BS
	R720	QRD167J-200	20 1/6W CARBON	EF
	R720	QRD167J-200	20 1/6W CARBON	EN
	R720	QRD167J-430	43 1/6W CARBON	G

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R720	QRD167J-430	43 1/6W CARBON	GI
	R720	QRD167J-200	20 1/6W CARBON	U
	R720	QRD167J-200	20 1/6W CARBON	US
	R720	QRD167J-200	20 1/6W CARBON	UT
	R721	QRD167J-473	47K 1/6W CARBON	
	R722	QRD167J-512	5.1K 1/6W CARBON	
	R723	QRD167J-512	5.1K 1/6W CARBON	
	R724	QRD167J-102	1K 1/6W CARBON	
	R730	QRD167J-331	330 1/6W CARBON	
	R731	QRD167J-331	330 1/6W CARBON	
	R732	QRD167J-331	330 1/6W CARBON	
	R733	QRD167J-331	330 1/6W CARBON	
	R734	QRD167J-223	22K 1/6W CARBON	
	R735	QRD167J-103	10K 1/6W CARBON	
	R736	QRD167J-333	33K 1/6W CARBON	
	R741	QRD167J-223	22K 1/6W CARBON	
⚠	R811	PTH61G25AR4R7M	POSISTOR I .M	
	R812	QRD167J-332	3.3K 1/6W CARBON	
	R813	QRD167J-222	2.2K 1/6W CARBON	
	VR201	QVDC94A-E15D	100K VARIABLE	

⚠ : SAFETY PARTS

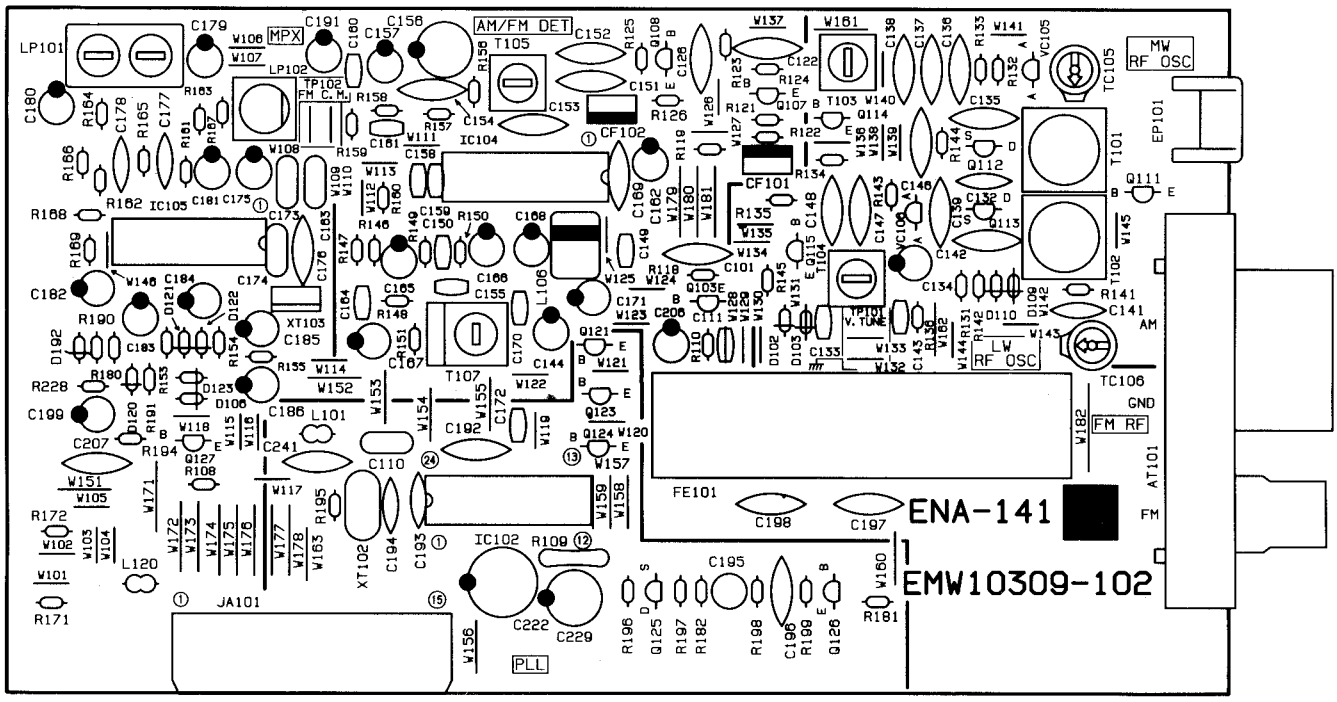
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	J202	EMV5109-003A	PLUG ASSY(3PIN)	
	J203	EMV7122-005	CONNECTOR(5PIN)	
	J205	EMV7122-004	CONNECTOR(4PIN)	
	J211	EMV5109-006A	PLUG ASSY(6PIN)	
	J304	EMB90YV-402A	ANTENNA TERMINAL	
	J305	EMN00YV-316A	3P PIN JACK	
	J703	EMV7122-103	CONNECTOR(3PIN)	
	J990	EMV5133-003	PLUG ASSY(3PIN)	
	L201	EQL0001-R45	INDUCTOR	
	L202	EQL0001-R45	INDUCTOR	
	L203	EQL0001-R45	INDUCTOR	
	L204	EQL0001-R45	INDUCTOR	
	L205	EQL0001-R45	INDUCTOR	
	L206	EQL0001-R45	INDUCTOR	
	BC211	EWS296-0120	SOCKET WIRE(6PIN)	
	EP001	EMZ4002-001	IM EARTH PLATE	
	FS701	E306805-040	SPACER	
	FS720	E3400-431	SPACER	
	JA001	EMV7127-015	CONNECTOR(15PIN)	
	JA002	EMV7127-013	CONNECTOR(13PIN)	
	JA003	EMV7127-019	CONNECTOR(19PIN)	
	JA004	EMV7127-007	CONNECTOR(7PIN)	
	JA005	EMV7127-007	CONNECTOR(7PIN)	
	JA203	EMV7125-007R	CONNECTOR(7PIN)	
	JA205	EMV7125-008R	CONNECTOR(8PIN)	
	JB101	EMV5140-015	PLUG ASSY(15PIN)	
	JB201	EMV5125-010	PLUG ASSY(10PIN)	
	JB202	EMV5125-011	PLUG ASSY(11PIN)	
	JB203	EMV5125-007	PLUG ASSY(7PIN)	
	JB204	EMV5125-008	PLUG ASSY(8PIN)	
	JB205	EMV5125-008	PLUG ASSY(8PIN)	
	JB206	EMV5125-004	PLUG ASSY(4PIN)	
	JB501	EMV5125-012	PLUG ASSY(12PIN)	
	JB502	EMV5125-012	PLUG ASSY(12PIN)	
	JB503	EMV5125-011	PLUG ASSY(11PIN)	
	JB801	EMV5125-005	PLUG ASSY(5PIN)	
	JB901	EMV7123-027	CONNECTOR(27PIN)	
	JT211	EMV7122-103	CONNECTOR(3PIN)	
	JT214	EMV7122-004	CONNECTOR(4PIN)	
	JT221	EMV7122-004	CONNECTOR(4PIN)	
	JT224	EMV7122-103	CONNECTOR(3PIN)	
	JT812	EMV7122-103	CONNECTOR(3PIN)	
	JT822	EMV7122-103	CONNECTOR(3PIN)	
	RY201	ESK8D24-212	RELAY	
	RY202	ESK8D24-212	RELAY	
	RY203	ESK8D24-212	RELAY	
	RY204	ESK8D24-212	RELAY	
	XT701	ECX0008-380KN	RESONATOR	

⚠ : SAFETY PARTS

■ENA-141☐ Tuner PC Board Ass'y

Note : ENA-141 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
ENA-141 [I]	US UT U	Singapore Taiwan Universal Type
ENA-141 [J]	A	Australia
ENA-141 [K]	EN EF	Scandinavia Continental Europe
ENA-141 [L]	G	Germany
ENA-141 [M]	BS	the U.K.
ENA-141 [N]	GI	Italy

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q103	2SC461(B,C)	SILICON	HITACHI	
	Q107	2SC535(B,C)	SILICON		
	Q108	2SC461(B,C)	SILICON	HITACHI	
	Q111	2SD2144S(VW)	SILICON	ROHM	BS
	Q111	2SD2144S(VW)	SILICON	ROHM	EF
	Q111	2SD2144S(VW)	SILICON	ROHM	EN
	Q111	2SD2144S(VW)	SILICON	ROHM	G
	Q111	2SD2144S(VW)	SILICON	ROHM	GI
	Q112	2SK301(Q,R)	F.E.T		
	Q113	2SK301(Q,R)	F.E.T		BS
	Q113	2SK301(Q,R)	F.E.T		EF
	Q113	2SK301(Q,R)	F.E.T		EN
	Q113	2SK301(Q,R)	F.E.T		G
	Q113	2SK301(Q,R)	F.E.T		GI
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	BS
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	EF
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	EN
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	G
	Q114	2SK301(P,Q)	F.E.T	MATSUSHITA	GI
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	BS
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	EF
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	EN
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	G
	Q115	2SK301(P,Q)	F.E.T	MATSUSHITA	GI
	Q121	DTA144ES	SILICON	ROHM	BS

⚠ : SAFETY PARTS

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q121	DTA144ES	SILICON	ROHM	EF
	Q121	DTA144ES	SILICON	ROHM	EN
	Q121	DTA144ES	SILICON	ROHM	G
	Q121	DTA144ES	SILICON	ROHM	GI
	Q123	DTA144ES	SILICON	ROHM	
	Q124	DTA144ES	SILICON	ROHM	
	Q125	2SK301(Q2)	F.E.T		
	Q126	2SC458(D)	SILICON		
	Q127	DTC144ES	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC102	LC7218	I.C.	SANYO	
	IC104	LA1266A	I.C.	SANYO	
	IC105	LA3401	I.C.	SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D102	1SS119	SILICON	HITACHI	BS
	D102	1SS119	SILICON	HITACHI	EF
	D102	1SS119	SILICON	HITACHI	EN
	D102	1SS119	SILICON	HITACHI	G
	D102	1SS119	SILICON	HITACHI	GI
	D103	1SS119	SILICON	HITACHI	BS
	D103	1SS119	SILICON	HITACHI	EF
	D103	1SS119	SILICON	HITACHI	EN
	D103	1SS119	SILICON	HITACHI	G
	D103	1SS119	SILICON	HITACHI	GI
	D106	1SS119	SILICON	HITACHI	
	D109	1SS119	SILICON	HITACHI	BS
	D109	1SS119	SILICON	HITACHI	EF
	D109	1SS119	SILICON	HITACHI	EN
	D109	1SS119	SILICON	HITACHI	G
	D109	1SS119	SILICON	HITACHI	GI
	D110	1SS119	SILICON	HITACHI	BS
	D110	1SS119	SILICON	HITACHI	EF
	D110	1SS119	SILICON	HITACHI	EN
	D110	1SS119	SILICON	HITACHI	G

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D110	1SS119	SILICON HITACHI	GI
	D120	1SS119	SILICON HITACHI	
	D121	1SS119	SILICON HITACHI	
	D122	1SS119	SILICON HITACHI	
	D123	1SS119	SILICON HITACHI	
	D192	MTZ5.1JC	ZENER ROHM	
	VC105	SVC342(L)	VARICAP SANYO	
	VC106	SVC342(L)	VARICAP SANYO	BS
	VC106	SVC342(L)	VARICAP SANYO	EF
	VC106	SVC342(L)	VARICAP SANYO	EN
	VC106	SVC342(L)	VARICAP SANYO	G
	VC106	SVC342(L)	VARICAP SANYO	GI

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C101	QCF11HP-223	0.022MF 50V CERAMIC	
	C110	QCZ0202-155	1.5MF 25V CERAMIC	
	C122	QCF11HP-223	0.022MF 50V CERAMIC	
	C126	QCF11HP-223	0.022MF 50V CERAMIC	
	C132	QCS21HJ-561	560PF 50V CERAMIC	
	C133	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C134	QET41EM-106	10MF 25V ELECTRO	
	C135	QCC21EM-223	0.022MF 25V CERAMIC	
	C136	QCT26CH-180	18PF 50V CERAMIC	
	C137	QCT26CH-221	220PF 50V CERAMIC	
	C138	QCT26CH-241	240PF 50V CERAMIC	
	C139	QCC21EM-223	0.022MF 25V CERAMIC	BS
	C139	QCC21EM-223	0.022MF 25V CERAMIC	EF
	C139	QCC21EM-223	0.022MF 25V CERAMIC	EN
	C139	QCC21EM-223	0.022MF 25V CERAMIC	G
	C139	QCC21EM-223	0.022MF 25V CERAMIC	GI
	C141	QCS21HJ-270	27PF 50V CERAMIC	BS
	C141	QCS21HJ-270	27PF 50V CERAMIC	EF
	C141	QCS21HJ-270	27PF 50V CERAMIC	EN
	C141	QCS21HJ-270	27PF 50V CERAMIC	G
	C141	QCS21HJ-270	27PF 50V CERAMIC	GI
	C142	QCY21HK-272	2700PF 50V CERAMIC	BS
	C142	QCY21HK-272	2700PF 50V CERAMIC	EF
	C142	QCY21HK-272	2700PF 50V CERAMIC	EN
	C142	QCY21HK-272	2700PF 50V CERAMIC	G
	C142	QCY21HK-272	2700PF 50V CERAMIC	GI
	C143	QCHB1EZ-223	0.022MF 25V CERAMIC	BS
	C143	QCHB1EZ-223	0.022MF 25V CERAMIC	EF
	C143	QCHB1EZ-223	0.022MF 25V CERAMIC	EN
	C143	QCHB1EZ-223	0.022MF 25V CERAMIC	G
	C143	QCHB1EZ-223	0.022MF 25V CERAMIC	GI
	C144	QET41EM-106	10MF 25V ELECTRO	BS
	C144	QET41EM-106	10MF 25V ELECTRO	EF
	C144	QET41EM-106	10MF 25V ELECTRO	EN
	C144	QET41EM-106	10MF 25V ELECTRO	G
	C144	QET41EM-106	10MF 25V ELECTRO	GI
	C146	QCT26CH-680	68PF 50V CERAMIC	BS
	C146	QCT26CH-680	68PF 50V CERAMIC	EF
	C146	QCT26CH-680	68PF 50V CERAMIC	EN
	C146	QCT26CH-680	68PF 50V CERAMIC	G
	C146	QCT26CH-680	68PF 50V CERAMIC	GI
	C147	QCT26CH-220	22PF 50V CERAMIC	BS
	C147	QCT26CH-220	22PF 50V CERAMIC	EF
	C147	QCT26CH-220	22PF 50V CERAMIC	EN
	C147	QCT26CH-220	22PF 50V CERAMIC	G
	C147	QCT26CH-220	22PF 50V CERAMIC	GI
	C148	QCT26CH-121	120PF 50V CERAMIC	BS
	C148	QCT26CH-121	120PF 50V CERAMIC	EF
	C148	QCT26CH-121	120PF 50V CERAMIC	EN
	C148	QCT26CH-121	120PF 50V CERAMIC	G
	C148	QCT26CH-121	120PF 50V CERAMIC	GI
	C149	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C150	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C151	QCF11HP-223	0.022MF 50V CERAMIC	
	C152	QCF11HP-223	0.022MF 50V CERAMIC	
	C153	QCC21EM-223	0.022MF 25V CERAMIC	
	C154	QCF11HP-223	0.022MF 50V CERAMIC	
	C155	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C156	QET41CM-227	220MF 16V ELECTRO	
	C157	QET41HM-474	0.47MF 50V ELECTRO	
	C158	QCBB1HK-101	100PF 50V CERAMIC	
	C159	QCBB1HK-101	100PF 50V CERAMIC	
	C160	QCBB1HK-221	220PF 50V CERAMIC	
	C161	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C162	QET41EM-106	10MF 25V ELECTRO	
	C163	QFLB1HJ-102	1000PF 50V MYLAR	
	C164	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C165	QET41HM-474	0.47MF 50V ELECTRO	
	C166	QETB1HM-225	2.2MF 50V ELECTRO	
	C167	QETB1HM-225	2.2MF 50V ELECTRO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C168	QET41HM-475	4.7MF 50V ELECTRO	
	C169	QCF11HP-223	0.022MF 50V CERAMIC	
	C170	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C171	QET41EM-106	10MF 25V ELECTRO	
	C172	QCVB1CM-103	0.01MF 16V CERAMIC	
	C173	QFLB1HJ-223	0.022MF 50V MYLAR	A
	C173	QFLB1HJ-223	0.022MF 50V MYLAR	BS
	C173	QFLB1HJ-223	0.022MF 50V MYLAR	EF
	C173	QFLB1HJ-223	0.022MF 50V MYLAR	EN
	C173	QFLB1HJ-223	0.022MF 50V MYLAR	G
	C173	QFLB1HJ-223	0.022MF 50V MYLAR	GI
	C173	QFLB1HJ-393	0.039MF 50V MYLAR	U
	C173	QFLB1HJ-393	0.039MF 50V MYLAR	US
	C173	QFLB1HJ-393	0.039MF 50V MYLAR	UT
	C174	QFLB1HJ-473	0.047MF 50V MYLAR	
	C175	QET41EM-106	10MF 25V ELECTRO	
	C176	QCY41HK-102	1000PF 50V CERAMIC	
	C177	QCS21HJ-561	560PF 50V CERAMIC	A
	C177	QCS21HJ-821	820PF 50V CERAMIC	BS
	C177	QCS21HJ-561	560PF 50V CERAMIC	EF
	C177	QCS21HJ-561	560PF 50V CERAMIC	EN
	C177	QCS21HJ-561	560PF 50V CERAMIC	G
	C177	QCS21HJ-561	560PF 50V CERAMIC	GI
	C177	QCS21HJ-821	820PF 50V CERAMIC	U
	C177	QCS21HJ-821	820PF 50V CERAMIC	US
	C177	QCS21HJ-821	820PF 50V CERAMIC	UT
	C178	QCS21HJ-561	560PF 50V CERAMIC	A
	C178	QCS21HJ-821	820PF 50V CERAMIC	BS
	C178	QCS21HJ-561	560PF 50V CERAMIC	EF
	C178	QCS21HJ-561	560PF 50V CERAMIC	EN
	C178	QCS21HJ-561	560PF 50V CERAMIC	G
	C178	QCS21HJ-561	560PF 50V CERAMIC	GI
	C178	QCS21HJ-821	820PF 50V CERAMIC	U
	C178	QCS21HJ-821	820PF 50V CERAMIC	US
	C178	QCS21HJ-821	820PF 50V CERAMIC	UT
	C179	QETB1HM-225	2.2MF 50V ELECTRO	
	C180	QETB1HM-225	2.2MF 50V ELECTRO	
	C181	QET41EM-106	10MF 25V ELECTRO	
	C182	QETB1HM-225	2.2MF 50V ELECTRO	
	C183	QET41HM-105	1MF 50V ELECTRO	
	C184	QET41HM-105	1MF 50V ELECTRO	
	C185	QETB1HM-225	2.2MF 50V ELECTRO	
	C186	QET41HM-474	0.47MF 50V ELECTRO	
	C191	QET41HM-475	4.7MF 50V ELECTRO	
	C192	QCC21EM-473	0.047MF 25V CERAMIC	
	C193	QCS21HJ-180	18PF 50V CERAMIC	
	C194	QCS21HJ-180	18PF 50V CERAMIC	
	C195	QEN41HM-474	0.47MF 50V NON POLE	
	C196	QCY41HK-102	1000PF 50V CERAMIC	
	C197	QCF11HP-223	0.022MF 50V CERAMIC	
	C198	QCF11HP-103	0.01MF 50V CERAMIC	
	C199	QET41HM-475	4.7MF 50V ELECTRO	
	C206	QET41HM-476	47MF 50V ELECTRO	G
	C206	QET41HM-476	47MF 50V ELECTRO	GI
	C207	QCF11HP-223	0.022MF 50V CERAMIC	
	C222	QET41CM-477	470MF 16V ELECTRO	
	C229	QET41CM-227	220MF 16V ELECTRO	
	C241	QCF11HP-223	0.022MF 50V CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R108	QRD167J-103	10K 1/6W CARBON	
⚠	R109	QRZ0077-680	68 1/4W FUSIBLE	
	R118	QRD167J-332	3.3K 1/6W CARBON	
	R119	QRD167J-221	220 1/6W CARBON	
	R121	QRD167J-391	390 1/6W CARBON	
	R122	QRD161J-272	2.7K 1/6W CARBON	
	R123	QRD167J-102	1K 1/6W CARBON	
	R124	QRD167J-681	680 1/6W CARBON	
	R125	QRD167J-332	3.3K 1/6W CARBON	
	R126	QRD167J-221	220 1/6W CARBON	
	R131	QRD167J-331	330 1/6W CARBON	
	R132	QRD167J-103	10K 1/6W CARBON	
	R133	QRD167J-473	47K 1/6W CARBON	
	R134	QRD167J-103	10K 1/6W CARBON	BS
	R134	QRD167J-103	10K 1/6W CARBON	EF
	R134	QRD167J-103	10K 1/6W CARBON	EN
	R134	QRD167J-103	10K 1/6W CARBON	G
	R134	QRD167J-103	10K 1/6W CARBON	GI
	R135	QRD167J-470	47 1/6W CARBON	
	R136	QRD167J-103	10K 1/6W CARBON	
	R141	QRD167J-472	4.7K 1/6W CARBON	BS
	R141	QRD167J-472	4.7K 1/6W CARBON	EF
	R141	QRD167J-472	4.7K 1/6W CARBON	EN
	R141	QRD167J-472	4.7K 1/6W CARBON	G
	R141	QRD167J-472	4.7K 1/6W CARBON	GI

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R142	QRD167J-331	330 1/6W CARBON	BS
	R142	QRD167J-331	330 1/6W CARBON	EF
	R142	QRD167J-331	330 1/6W CARBON	EN
	R142	QRD167J-331	330 1/6W CARBON	G
	R142	QRD167J-331	330 1/6W CARBON	GI
	R143	QRD167J-103	10K 1/6W CARBON	BS
	R143	QRD167J-103	10K 1/6W CARBON	EF
	R143	QRD167J-103	10K 1/6W CARBON	EN
	R143	QRD167J-103	10K 1/6W CARBON	G
	R143	QRD167J-103	10K 1/6W CARBON	GI
	R144	QRD167J-473	47K 1/6W CARBON	BS
	R144	QRD167J-473	47K 1/6W CARBON	EF
	R144	QRD167J-473	47K 1/6W CARBON	EN
	R144	QRD167J-473	47K 1/6W CARBON	G
	R144	QRD167J-473	47K 1/6W CARBON	GI
	R145	QRD167J-103	10K 1/6W CARBON	BS
	R145	QRD167J-103	10K 1/6W CARBON	EF
	R145	QRD167J-103	10K 1/6W CARBON	EN
	R145	QRD167J-103	10K 1/6W CARBON	G
	R145	QRD167J-103	10K 1/6W CARBON	GI
	R146	QRD167J-560	56 1/6W CARBON	
	R147	QRD167J-103	10K 1/6W CARBON	
	R148	QRD167J-103	10K 1/6W CARBON	
	R149	QRD167J-223	22K 1/6W CARBON	A
	R149	QRD167J-223	22K 1/6W CARBON	BS
	R149	QRD167J-223	22K 1/6W CARBON	EF
	R149	QRD167J-223	22K 1/6W CARBON	EN
	R149	QRD167J-273	27K 1/6W CARBON	G
	R149	QRD167J-273	27K 1/6W CARBON	GI
	R149	QRD167J-223	22K 1/6W CARBON	U
	R149	QRD167J-223	22K 1/6W CARBON	US
	R149	QRD167J-223	22K 1/6W CARBON	UT
	R150	QRD167J-103	10K 1/6W CARBON	
	R151	QRD167J-222	2.2K 1/6W CARBON	
	R153	QRD167J-103	10K 1/6W CARBON	
	R154	QRD167J-103	10K 1/6W CARBON	
	R155	QRD167J-562	5.6K 1/6W CARBON	
	R156	QRD167J-822	8.2K 1/6W CARBON	
	R157	QRD167J-103	10K 1/6W CARBON	
	R158	QRD167J-273	27K 1/6W CARBON	
	R159	QRD167J-561	560 1/6W CARBON	
	R160	QRD167J-103	10K 1/6W CARBON	A
	R160	QRD167J-102	1K 1/6W CARBON	BS
	R160	QRD167J-103	10K 1/6W CARBON	EF
	R160	QRD167J-103	10K 1/6W CARBON	EN
	R160	QRD167J-103	10K 1/6W CARBON	G
	R160	QRD167J-103	10K 1/6W CARBON	GI
	R160	QRD167J-562	5.6K 1/6W CARBON	U
	R160	QRD167J-562	5.6K 1/6W CARBON	US
	R160	QRD167J-562	5.6K 1/6W CARBON	UT
	R161	QRD167J-104	100K 1/6W CARBON	A
	R161	QRD167J-683	68K 1/6W CARBON	BS
	R161	QRD167J-104	100K 1/6W CARBON	EF
	R161	QRD167J-104	100K 1/6W CARBON	EN
	R161	QRD167J-104	100K 1/6W CARBON	G
	R161	QRD167J-104	100K 1/6W CARBON	GI
	R161	QRD167J-823	82K 1/6W CARBON	U
	R161	QRD167J-823	82K 1/6W CARBON	US
	R161	QRD167J-823	82K 1/6W CARBON	UT
	R162	QRD167J-104	100K 1/6W CARBON	A
	R162	QRD167J-683	68K 1/6W CARBON	BS
	R162	QRD167J-104	100K 1/6W CARBON	EF
	R162	QRD167J-104	100K 1/6W CARBON	EN
	R162	QRD167J-104	100K 1/6W CARBON	G
	R162	QRD167J-104	100K 1/6W CARBON	GI
	R162	QRD167J-823	82K 1/6W CARBON	U
	R162	QRD167J-823	82K 1/6W CARBON	US
	R162	QRD167J-823	82K 1/6W CARBON	UT
	R163	QRD167J-332	3.3K 1/6W CARBON	A
	R163	QRD167J-332	3.3K 1/6W CARBON	BS
	R163	QRD167J-332	3.3K 1/6W CARBON	EF
	R163	QRD167J-332	3.3K 1/6W CARBON	EN
	R163	QRD167J-332	3.3K 1/6W CARBON	G
	R163	QRD167J-332	3.3K 1/6W CARBON	GI
	R163	QRD167J-472	4.7K 1/6W CARBON	U
	R163	QRD167J-472	4.7K 1/6W CARBON	US
	R163	QRD167J-472	4.7K 1/6W CARBON	UT
	R164	QRD167J-332	3.3K 1/6W CARBON	A
	R164	QRD167J-332	3.3K 1/6W CARBON	BS
	R164	QRD167J-332	3.3K 1/6W CARBON	EF
	R164	QRD167J-332	3.3K 1/6W CARBON	EN
	R164	QRD167J-332	3.3K 1/6W CARBON	G
	R164	QRD167J-332	3.3K 1/6W CARBON	GI
	R164	QRD167J-472	4.7K 1/6W CARBON	U
	R164	QRD167J-472	4.7K 1/6W CARBON	US
	R164	QRD167J-472	4.7K 1/6W CARBON	UT
	R165	QRD167J-274	270K 1/6W CARBON	A
	R165	QRD167J-274	270K 1/6W CARBON	BS
	R165	QRD167J-274	270K 1/6W CARBON	EF
	R165	QRD167J-274	270K 1/6W CARBON	EN

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R165	QRD167J-274	270K 1/6W CARBON	G
	R165	QRD167J-274	270K 1/6W CARBON	GI
	R165	QRD167J-184	180K 1/6W CARBON	U
	R165	QRD167J-184	180K 1/6W CARBON	US
	R165	QRD167J-184	180K 1/6W CARBON	UT
	R166	QRD167J-274	270K 1/6W CARBON	A
	R166	QRD167J-274	270K 1/6W CARBON	BS
	R166	QRD167J-274	270K 1/6W CARBON	EF
	R166	QRD167J-274	270K 1/6W CARBON	EN
	R166	QRD167J-274	270K 1/6W CARBON	G
	R166	QRD167J-274	270K 1/6W CARBON	GI
	R166	QRD167J-184	180K 1/6W CARBON	U
	R166	QRD167J-184	180K 1/6W CARBON	US
	R166	QRD167J-184	180K 1/6W CARBON	UT
	R167	QRD167J-473	47K 1/6W CARBON	A
	R167	QRD167J-473	47K 1/6W CARBON	BS
	R167	QRD167J-473	47K 1/6W CARBON	EF
	R167	QRD167J-473	47K 1/6W CARBON	EN
	R167	QRD167J-473	47K 1/6W CARBON	G
	R167	QRD167J-473	47K 1/6W CARBON	GI
	R167	QRD167J-393	39K 1/6W CARBON	U
	R167	QRD167J-393	39K 1/6W CARBON	US
	R167	QRD167J-393	39K 1/6W CARBON	UT
	R168	QRD167J-103	10K 1/6W CARBON	
	R169	QRD167J-103	10K 1/6W CARBON	
	R171	QRD167J-682	6.8K 1/6W CARBON	
	R172	QRD167J-682	6.8K 1/6W CARBON	
	R180	QRD167J-103	10K 1/6W CARBON	
	R181	QRD167J-222	2.2K 1/6W CARBON	
	R182	QRD167J-181	180 1/6W CARBON	
	R190	QRD167J-103	10K 1/6W CARBON	
	R191	QRD167J-562	5.6K 1/6W CARBON	
	R194	QRD167J-103	10K 1/6W CARBON	
	R195	QRD167J-473	47K 1/6W CARBON	
	R196	QRD167J-103	10K 1/6W CARBON	A
	R196	QRD167J-222	2.2K 1/6W CARBON	BS
	R196	QRD167J-222	2.2K 1/6W CARBON	EF
	R196	QRD167J-222	2.2K 1/6W CARBON	EN
	R196	QRD167J-222	2.2K 1/6W CARBON	G
	R196	QRD167J-222	2.2K 1/6W CARBON	GI
	R196	QRD167J-103	10K 1/6W CARBON	U
	R196	QRD167J-103	10K 1/6W CARBON	US
	R196	QRD167J-103	10K 1/6W CARBON	UT
	R197	QRD167J-222	2.2K 1/6W CARBON	
	R198	QRD167J-332	3.3K 1/6W CARBON	A
	R198	QRD167J-822	8.2K 1/6W CARBON	BS
	R198	QRD167J-822	8.2K 1/6W CARBON	EF
	R198	QRD167J-822	8.2K 1/6W CARBON	EN
	R198	QRD167J-822	8.2K 1/6W CARBON	G
	R198	QRD167J-822	8.2K 1/6W CARBON	GI
	R198	QRD167J-332	3.3K 1/6W CARBON	U
	R198	QRD167J-332	3.3K 1/6W CARBON	US
	R198	QRD167J-332	3.3K 1/6W CARBON	UT
	R199	QRD167J-472	4.7K 1/6W CARBON	
	R228	QRD167J-222	2.2K 1/6W CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	L101	EQL4004-1R0	INDUCTOR	
	L106	EQL3001-102K	INDUCTOR	
	L110	EQL4004-100	INDUCTOR	G
	L110	EQL4004-100	INDUCTOR	GI
	L120	EQL4004-1R0	INDUCTOR	
	T101	EQR1111-014	AM RF COIL	
	T102	EQR1111-005	AM RF COIL	BS
	T102	EQR1111-005	AM RF COIL	EF
	T102	EQR1111-005	AM RF COIL	EN
	T102	EQR1111-005	AM RF COIL	G
	T102	EQR1111-005	AM RF COIL	GI
	T103	EQR1207-017	MW OSC COIL	
	T104	EQR1307-010	LW OSC COIL	BS
	T104	EQR1307-010	LW OSC COIL	EF
	T104	EQR1307-010	LW OSC COIL	EN
	T104	EQR1307-010	LW OSC COIL	G
	T104	EQR1307-010	LW OSC COIL	GI
	T105	EQT2140-017	I.F. TRANSFORMER	
	T107	ECB1560-010	CERAMIC FILTER	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	
	CF101	ECB2123-006R	CERAMIC FILTER	A
	CF101	ECB2118-007R	CERAMIC FILTER	BS
	CF101	ECB2118-007R	CERAMIC FILTER	EF
	CF101	ECB2118-007R	CERAMIC FILTER	EN
	CF101	ECB2118-007R	CERAMIC FILTER	G
	CF101	ECB2118-007R	CERAMIC FILTER	GI
	CF101	ECB2123-006R	CERAMIC FILTER	U
	CF101	ECB2123-006R	CERAMIC FILTER	US
	CF101	ECB2123-006R	CERAMIC FILTER	UT
	CF102	ECB2123-006R	CERAMIC FILTER	A

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	CF102	ECB2118-007R	CERAMIC FILTER	BS
	CF102	ECB2118-007R	CERAMIC FILTER	EF
	CF102	ECB2118-007R	CERAMIC FILTER	EN
	CF102	ECB2118-007R	CERAMIC FILTER	G
	CF102	ECB2118-007R	CERAMIC FILTER	GI
	CF102	ECB2123-006R	CERAMIC FILTER	U
	CF102	ECB2123-006R	CERAMIC FILTER	US
	CF102	ECB2123-006R	CERAMIC FILTER	UT
	EP102	E308655-001	SHIELD BKT	
	FE101	EAF2203-001	FRONT END	A
	FE101	EAF2203-001	FRONT END	BS
	FE101	EAF2203-001	FRONT END	EF
	FE101	EAF2203-001	FRONT END	EN
	FE101	EAF2203-003	FRONT END	G
	FE101	EAF2203-003	FRONT END	GI

⚠ : SAFETY PARTS

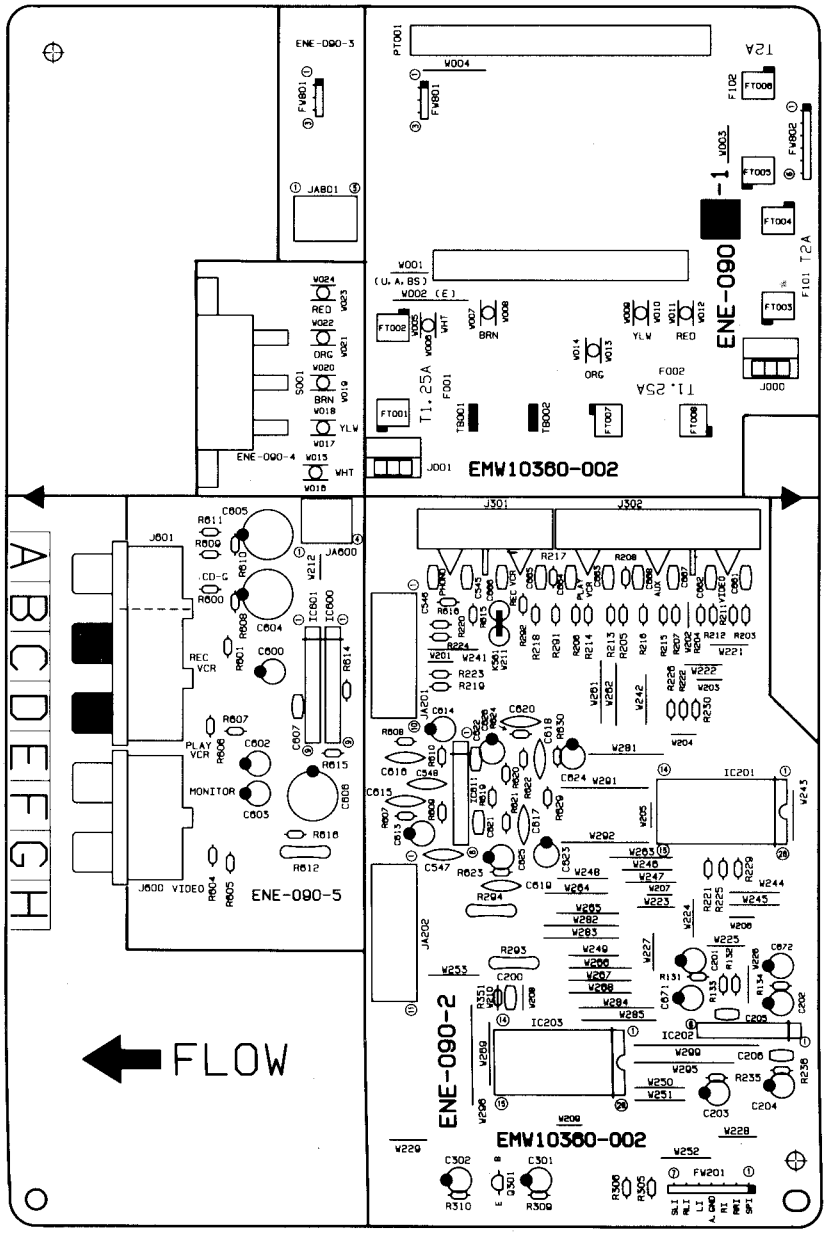
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	FE101	EAF2203-001	FRONT END	U
	FE101	EAF2203-001	FRONT END	US
	FE101	EAF2203-001	FRONT END	UT
	JA101	EMV7140-L15R	CONNECTOR(15PIN)	
	LP101	EQF0101-002	LOW PASS FILTER	
	LP102	EQF0102-001	LOW PASS FILTER	G
	LP102	EQF0102-001	LOW PASS FILTER	GI
	TC105	ENZ1003-006	TRIMMER	
	TC106	ENZ1003-006	TRIMMER	BS
	TC106	ENZ1003-006	TRIMMER	EF
	TC106	ENZ1003-006	TRIMMER	EN
	TC106	ENZ1003-006	TRIMMER	G
	TC106	ENZ1003-006	TRIMMER	GI
	XT102	ECX0007-200KC	RESONATOR	
	XT103	ECX0000-456KR	RESONATOR	

⚠ : SAFETY PARTS

■ENE-090☐ Source Selector & Power Supply PC Board Ass'y

Note : ENE-090☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
ENE-090 [A]	US UT U	Singapore Taiwan Universal Type
ENE-090 [B]	EN EF	Scandinavia Continental Europe
ENE-090 [C] BS	BS	the U.K.
ENE-090 [D]	G GI	Germany Italy
ENE-090 [E]	A	Australia

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q301	2SC3311A(Q,R)	SILICON MATSUSHITA	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC201	TC9163N	I.C. TOSHIBA	
	IC202	VC4580L	I.C. DAINICHI	
	IC203	TC9164N	I.C. TOSHIBA	
	IC600	LA7952	I.C. SANYO	
	IC601	LA7952	I.C. SANYO	
	IC611	VC4580LD	I.C. DAINICHI	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C200	QCBB1HK-561	560PF 50V CERAMIC	
	C201	EEZ5009-226	22MF ELECTRO	
	C202	EEZ5009-226	22MF ELECTRO	
	C203	EEZ5009-226	22MF ELECTRO	
	C204	EEZ5009-226	22MF ELECTRO	
	C205	QCBB1HK-101	100PF 50V CERAMIC	
	C206	QCBB1HK-101	100PF 50V CERAMIC	
	C301	QET41CM-226	22MF 16V ELECTRO	
	C302	QET41CM-226	22MF 16V ELECTRO	
	C545	QCBB1HK-101	100PF 50V CERAMIC	A
	C545	QCBB1HK-101	100PF 50V CERAMIC	BS
	C545	QCBB1HK-101	100PF 50V CERAMIC	EF
	C545	QCBB1HK-101	100PF 50V CERAMIC	EN
	C545	QCBB1HK-331	330PF 50V CERAMIC	G
	C545	QCBB1HK-331	330PF 50V CERAMIC	GI
	C545	QCBB1HK-101	100PF 50V CERAMIC	U
	C545	QCBB1HK-101	100PF 50V CERAMIC	US
	C545	QCBB1HK-101	100PF 50V CERAMIC	UT
	C546	QCBB1HK-101	100PF 50V CERAMIC	A
	C546	QCBB1HK-101	100PF 50V CERAMIC	BS
	C546	QCBB1HK-101	100PF 50V CERAMIC	EF
	C546	QCBB1HK-101	100PF 50V CERAMIC	EN
	C546	QCBB1HK-331	330PF 50V CERAMIC	G
	C546	QCBB1HK-331	330PF 50V CERAMIC	GI
	C546	QCBB1HK-101	100PF 50V CERAMIC	U
	C546	QCBB1HK-101	100PF 50V CERAMIC	US
	C546	QCBB1HK-101	100PF 50V CERAMIC	UT
	C547	QCY41HK-102	1000PF 50V CERAMIC	
	C548	QCY41HK-102	1000PF 50V CERAMIC	
	C600	QET41AM-476	47MF 10V ELECTRO	U
	C600	QET41AM-476	47MF 10V ELECTRO	US
	C600	QET41AM-476	47MF 10V ELECTRO	UT
	C602	QET41AM-476	47MF 10V ELECTRO	
	C603	QET41AM-476	47MF 10V ELECTRO	
	C604	QETB0JM-108	1000MF 6.3V ELECTRO	
	C605	QETB0JM-108	1000MF 6.3V ELECTRO	
	C606	QETB1CM-228M	2200MF 16V ELECTRO	
	C607	QCVB1CM-103	0.01MF 16V CERAMIC	
	C613	QETB1HM-225	2.2MF 50V ELECTRO	
	C614	QETB1HM-225	2.2MF 50V ELECTRO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C615	QCS21HJ-221	220PF 50V CERAMIC	
	C616	QCS21HJ-221	220PF 50V CERAMIC	
	C617	QCY21HK-182	1800PF 50V CERAMIC	
	C618	QCY21HK-182	1800PF 50V CERAMIC	
	C619	QCY21HK-682	6800PF 50V CERAMIC	
	C620	QCY21HK-682	6800PF 50V CERAMIC	
	C621	QCBB1HK-101	100PF 50V CERAMIC	
	C622	QCBB1HK-101	100PF 50V CERAMIC	
	C623	QETB1HM-225	2.2MF 50V ELECTRO	
	C624	QETB1HM-225	2.2MF 50V ELECTRO	
	C625	QETB1EM-226	22MF 25V ELECTRO	
	C626	QETB1EM-226	22MF 25V ELECTRO	
	C661	QCBB1HK-331	330PF 50V CERAMIC	G
	C661	QCBB1HK-331	330PF 50V CERAMIC	GI
	C662	QCBB1HK-331	330PF 50V CERAMIC	G
	C662	QCBB1HK-331	330PF 50V CERAMIC	GI
	C663	QCBB1HK-331	330PF 50V CERAMIC	G
	C663	QCBB1HK-331	330PF 50V CERAMIC	GI
	C664	QCBB1HK-331	330PF 50V CERAMIC	G
	C664	QCBB1HK-331	330PF 50V CERAMIC	GI
	C665	QCBB1HK-331	330PF 50V CERAMIC	G
	C665	QCBB1HK-331	330PF 50V CERAMIC	GI
	C666	QCBB1HK-331	330PF 50V CERAMIC	G
	C666	QCBB1HK-331	330PF 50V CERAMIC	GI
	C667	QCBB1HK-331	330PF 50V CERAMIC	G
	C667	QCBB1HK-331	330PF 50V CERAMIC	GI
	C668	QCBB1HK-331	330PF 50V CERAMIC	G
	C668	QCBB1HK-331	330PF 50V CERAMIC	GI
	C671	QET41CM-476	47MF 16V ELECTRO	
	C672	QET41CM-476	47MF 16V ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R131	QRD167J-104	100K 1/6W CARBON	
	R132	QRD167J-104	100K 1/6W CARBON	
	R133	QRD167J-104	100K 1/6W CARBON	
	R134	QRD167J-104	100K 1/6W CARBON	
	R203	QRD167J-153	15K 1/6W CARBON	
	R204	QRD167J-153	15K 1/6W CARBON	
	R205	QRD167J-153	15K 1/6W CARBON	
	R206	QRD167J-153	15K 1/6W CARBON	
	R207	QRD167J-153	15K 1/6W CARBON	
	R208	QRD167J-153	15K 1/6W CARBON	
	R211	QRD167J-104	100K 1/6W CARBON	
	R212	QRD167J-104	100K 1/6W CARBON	
	R213	QRD167J-104	100K 1/6W CARBON	
	R214	QRD167J-104	100K 1/6W CARBON	
	R215	QRD167J-104	100K 1/6W CARBON	
	R216	QRD167J-104	100K 1/6W CARBON	
	R217	QRD167J-222	2.2K 1/6W CARBON	
	R218	QRD167J-222	2.2K 1/6W CARBON	
	R219	QRD167J-242	2.4K 1/6W CARBON	
	R220	QRD167J-242	2.4K 1/6W CARBON	
	R221	QRD167J-822	8.2K 1/6W CARBON	
	R222	QRD167J-822	8.2K 1/6W CARBON	
	R223	QRD167J-221	220 1/6W CARBON	
	R224	QRD167J-221	220 1/6W CARBON	
	R225	QRD167J-104	100K 1/6W CARBON	
	R226	QRD167J-104	100K 1/6W CARBON	
	R229	QRD167J-103	10K 1/6W CARBON	
	R230	QRD167J-103	10K 1/6W CARBON	
	R235	QRD167J-104	100K 1/6W CARBON	
	R236	QRD167J-104	100K 1/6W CARBON	
	R291	QRD167J-513	51K 1/6W CARBON	
	R292	QRD167J-513	51K 1/6W CARBON	
	R293	QRD148J-100	10 1/4W CARBON	
	R294	QRD148J-100	10 1/4W CARBON	
	R305	QRD167J-104	100K 1/6W CARBON	
	R306	QRD167J-104	100K 1/6W CARBON	
	R309	QRD167J-105	1M 1/6W CARBON	
	R310	QRD167J-102	1K 1/6W CARBON	
	R600	QRD167J-750	75 1/6W CARBON	U
	R600	QRD167J-750	75 1/6W CARBON	US
	R600	QRD167J-750	75 1/6W CARBON	UT
	R601	QRD161J-100	10 1/6W CARBON	U
	R601	QRD161J-100	10 1/6W CARBON	US
	R601	QRD161J-100	10 1/6W CARBON	UT
	R604	QRD167J-750	75 1/6W CARBON	
	R605	QRD161J-100	10 1/6W CARBON	
	R606	QRD167J-750	75 1/6W CARBON	
	R607	QRD161J-272	2.7K 1/6W CARBON	
	R608	QRD161J-272	2.7K 1/6W CARBON	
	R609	QRD167J-104	100K 1/6W CARBON	
	R610	QRD167J-104	100K 1/6W CARBON	
	R611	QRD167J-750	75 1/6W CARBON	
	R612	QRD148J-100	10 1/4W CARBON	
	R615	QRD167J-104	100K 1/6W CARBON	
	R616	QRD167J-104	100K 1/6W CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R619	QRD167J-751	750 1/6W CARBON	
	R620	QRD167J-751	750 1/6W CARBON	
	R621	QRD167J-393	39K 1/6W CARBON	
	R622	QRD167J-393	39K 1/6W CARBON	
	R623	QRD167J-474	470K 1/6W CARBON	
	R624	QRD167J-474	470K 1/6W CARBON	
	R629	QRD167J-104	100K 1/6W CARBON	
	R630	QRD167J-104	100K 1/6W CARBON	
	R637	QRD161J-100	10 1/6W CARBON	
	R638	QRD167J-473	47K 1/6W CARBON	
	R639	QRD167J-750	75 1/6W CARBON	
	R640	QRD167J-473	47K 1/6W CARBON	
	R644	QRD167J-474	470K 1/6W CARBON	
	R645	QRD167J-474	470K 1/6W CARBON	
	R646	QRD167J-474	470K 1/6W CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	J	EMV7112-003	CONNECTOR(3PIN)	
	J001	EMV7112-003	CONNECTOR(3PIN)	
	J301	EMN00TV-405A	4P PIN JACK	
	J302	EMN00TV-602A	6P PIN JACK	
	J600	EMN00YV-205A	2P PIN JACK	
	J601	EMN00YV-205A	2P PIN JACK	A
	J601	EMN00YV-205A	2P PIN JACK	BS
	J601	EMN00YV-205A	2P PIN JACK	EF
	J601	EMN00YV-205A	2P PIN JACK	EN
	J601	EMN00YV-205A	2P PIN JACK	G
	J601	EMN00YV-205A	2P PIN JACK	GI
	J601	EMN00YV-304A	3P PIN JACK	U
	J601	EMN00YV-304A	3P PIN JACK	US
	J601	EMN00YV-304A	3P PIN JACK	UT
	S001	QSS4004-E01	SLIDE SWITCH(VOLTAGE SELECTOR)	U
	S001	QSS4004-E01	SLIDE SWITCH(VOLTAGE SELECTOR)	US
	S001	QSS4004-E01	SLIDE SWITCH(VOLTAGE SELECTOR)	UT
	FL001	E67132-T2R5	T2R5 FUSE LABEL	U
	FL001	E67132-T2R5	T2R5 FUSE LABEL	US
	FL001	E67132-T2R5	T2R5 FUSE LABEL	UT
	FT001	EMG7331-002U	FUSE CLIP	
	FT002	EMG7331-002	FUSE CLIP	
	FT003	EMG7331-002	FUSE CLIP	
	FT004	EMG7331-002U	FUSE CLIP	
	FT005	EMG7331-002	FUSE CLIP	
	FT006	EMG7331-002U	FUSE CLIP	
	FT007	EMG7331-002	FUSE CLIP	U
	FT007	EMG7331-002	FUSE CLIP	US
	FT007	EMG7331-002	FUSE CLIP	UT
	FT008	EMG7331-002U	FUSE CLIP	U
	FT008	EMG7331-002U	FUSE CLIP	US
	FT008	EMG7331-002U	FUSE CLIP	UT
	FW201	EWR37B-10LST	FLAT WIRE(7PIN)	
	FW801	EWR33B-10SST	FLAT WIRE(3PIN)	
	FW802	EWR36B-10LST	FLAT WIRE(6PIN)	
	JA201	EMV7125-010R	CONNECTOR(10PIN)	
	JA202	EMV7125-011R	CONNECTOR(11PIN)	
	JA600	EMV7125-004R	CONNECTOR(4PIN)	
	JA801	EMV7125-005R	CONNECTOR(5PIN)	
	TB001	EMZ4001-001	TAB	
	TB002	EMZ4001-001	TAB	

⚠ : SAFETY PARTS

Accessories List

⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-2030A	INSTRUCTION BOOK	1		U
	E30580-2030A	INSTRUCTION BOOK	1		US
	E30580-2030A	INSTRUCTION BOOK	1		UT
	E30580-2031A	INSTRUCTION BOOK	1		EF
	E30580-2031A	INSTRUCTION BOOK	1		G
	E30580-2031A	INSTRUCTION BOOK	1		GI
	E30580-2032A	INSTRUCTION BOOK	1		A
	E30580-2032ABS	INSTRUCTION BOOK	1		BS
	E30580-2033A	INSTRUCTION BOOK	1		EN
	BT20060	WARRANTY CARD	1		BS
	BT-20134	WARRANTY CARD	1		G
	BT-20122	WARRANTY CARD	1		A
	BT-20122-1	LTD STECKER	1		A
	BT-20066A	EEC AGENCY	1		BS
	EWP502-005K	BILT-IN ANTENNA	1		A
	EWP502-005K	BILT-IN ANTENNA	1		BS
	EWP502-005K	BILT-IN ANTENNA	1		EF
	EWP502-005K	BILT-IN ANTENNA	1		EN
	EWP502-005K	BILT-IN ANTENNA	1		GI
	EWP502-005K	BILT-IN ANTENNA	1		U
	EWP502-005K	BILT-IN ANTENNA	1		US
	EWP502-005K	BILT-IN ANTENNA	1		UT
	E67007-001	WIRE ANTENNA	1		G
	E43486-546A	CAUTION SHEET	1	FOR VOLTAGE SELECTOR	U
	E43486-546A	CAUTION SHEET	1	FOR VOLTAGE SELECTOR	US
	E43486-546A	CAUTION SHEET	1	FOR VOLTAGE SELECTOR	UT
⚠	ENZ2202-001	SIEMENS PLUG	1		US
⚠	E04056	SIEMENS PLUG	1		U
⚠	E04056	SIEMENS PLUG	1		UT
	E43486-340A	SAFETY SHEET	1		BS
	EMZ2001-014	ADAPTOR	1		A
	EMZ2001-014	ADAPTOR	1		BS
	EMZ2001-014	ADAPTOR	1		EF
	EMZ2001-014	ADAPTOR	1		EN
	EMZ2001-014	ADAPTOR	1		GI
	EMZ2001-014	ADAPTOR	1		U
	EMZ2001-014	ADAPTOR	1		US
	EMZ2001-014	ADAPTOR	1		UT
	EQB4001-015	LOOP ANTENNA	1		
	EWP902-031	PLUG CORD	2		
	RM-SEMXG9U	REMOTE CONTROLLER	1		
	UR64EC1293A	BATTERY COVER	1		
	UM-4NJ-2PSA	BATTERY	1		
	E43486-519A	CAUTION SHEET	1		
	QPGA025-03505	ENVELOPE	1		A
	QPGA025-03505	ENVELOPE	1		EF
	QPGA025-03505	ENVELOPE	1		EN
	QPGA025-03505	ENVELOPE	1		G
	QPGA025-03505	ENVELOPE	1		GI
	QPGA025-03505	ENVELOPE	1		U
	QPGA025-03505	ENVELOPE	1		US
	QPGA025-03505	ENVELOPE	1		UT
	QPGA025-03505B	ENVELOPE	1		BS

The Marks for Designated Areas

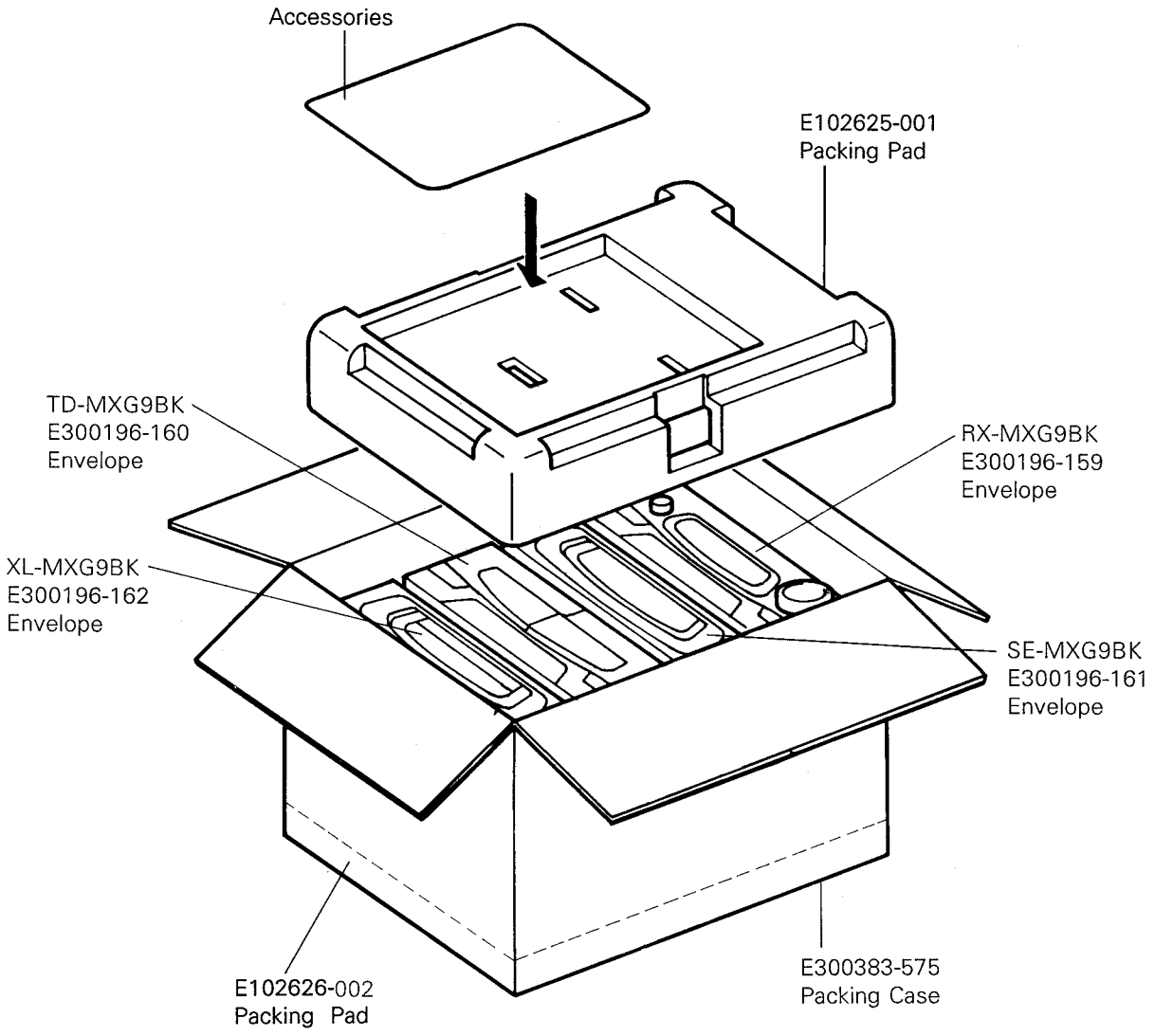
A ..... Australia
BS ..... the U.K.
US ..... Singapore
EN ..... Scandinavia
G ..... Germany
UT ..... Taiwan
EF ..... Continental Europe
GI ..... Itary
U ..... Universal Type

No mark indicates all areas.

⚠ SAFETY PATYS

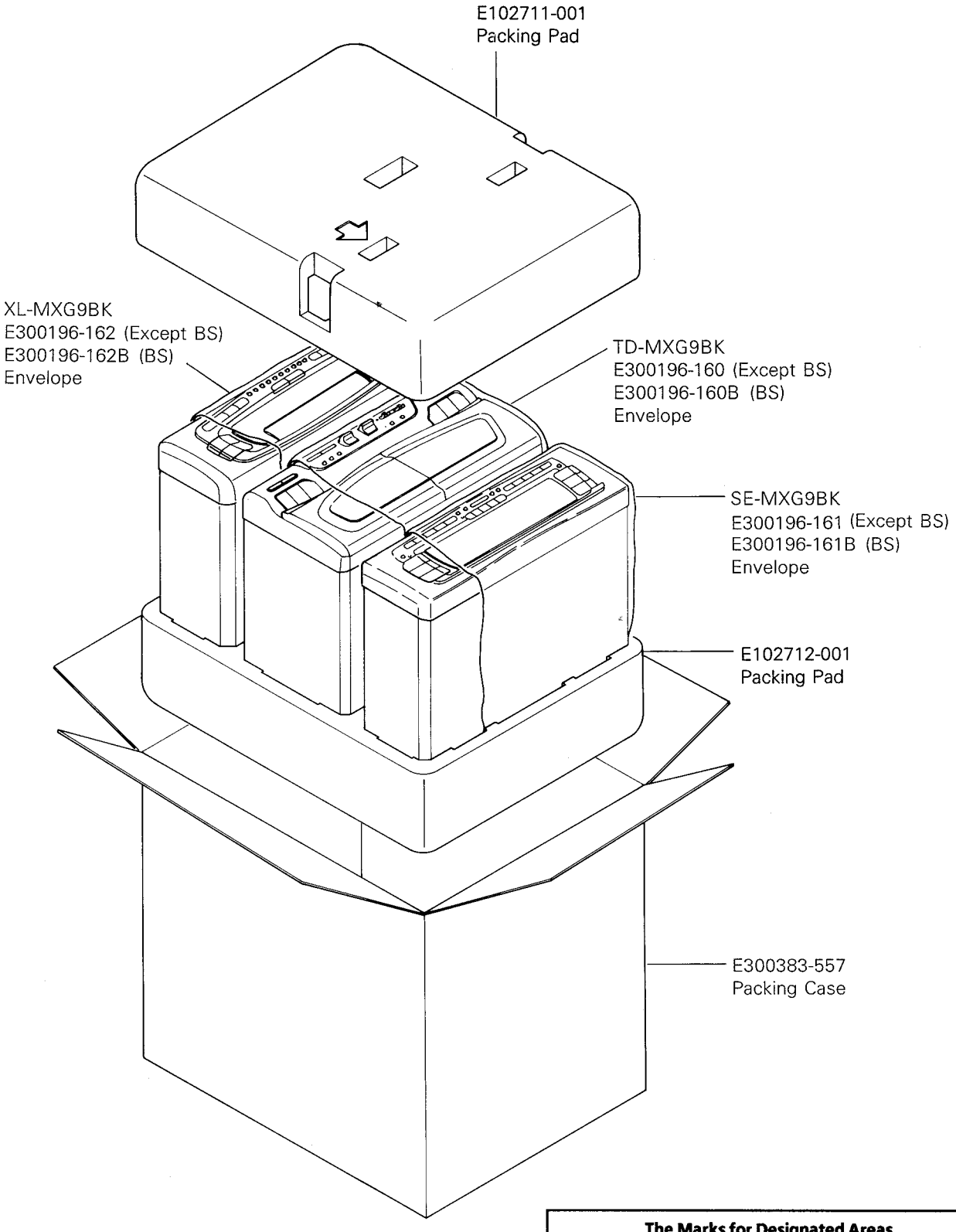
Packing Materials and Part Numbers

■ CA-MXG9BK (U, UT, US)

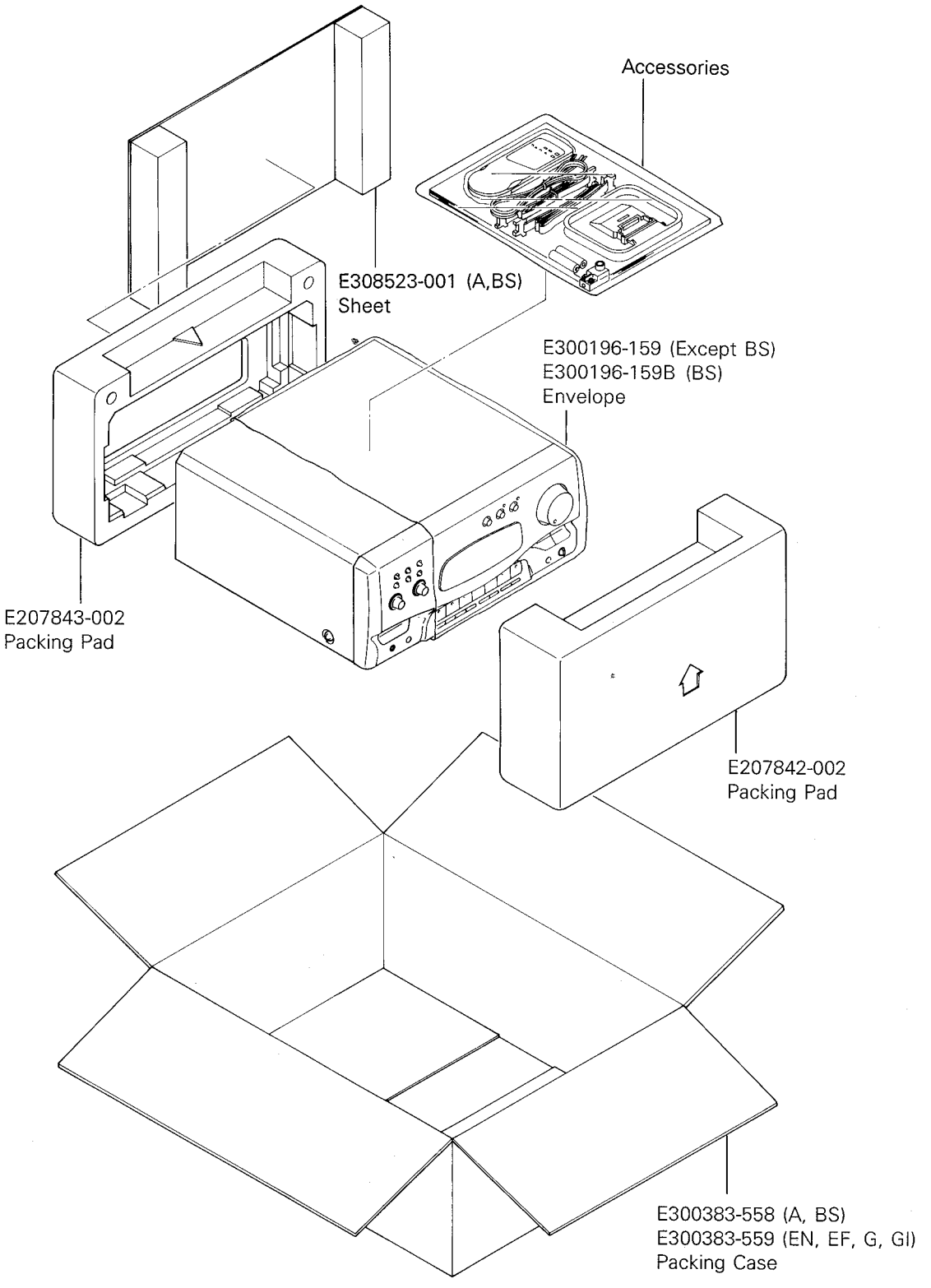


The Marks for Designated Areas			
US	Singapore	UT	Taiwan
U	Universal Type	No mark indicates all areas.	

■ XT-MXG9BK (A, EN, EF, BS, G, GI)



The Marks for Designated Areas			
A	Australia	EN	Scandinavia
EF	Continental Europe	BS	the U.K.
G	Germany	GI	Italy
No mark indicates all areas.			



The Marks for Designated Areas			
A	Australia	EN	Scandinavia
EF	Continental Europe	BS	the U.K.
G	Germany	GI	Italy
No mark indicates all areas.			

JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO PRODUCTS DIVISION, 1644, Shimotsuruma, Yamato-shi, Kanagawa-ken, 242, JAPAN

(No.20434)

Printed in Japan
9306 (S)